LBT-A295/D550

SERVICE MANUAL

US Model
LBT-D550

Canadian Model
AEP Model
UK Model
E Model
Australian Model
PX Model
LBT-A295

• LBT-A295/D550 is composed of following models.
As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR THESE SYSTEM

	LBT-A295								LBT-D550
	Canadian	AEP	UK	G	E	AU	MX	PX	US
STEREO DECK RECEIVER	HCD-A295								HCD-D550
TURN TABLE		PS-LX56P							
SPEAKER SYSTEM	SS-D290				SS-D290				SS-D555

AU : AUSTRALIA
MX : MEXICO
G : GERMANY

PARTS LIST

Part No.	Description
1-501-374-11	ANTENNA , LOOP
1-501-536-11	ANTENNA (AEP)
3-758-285-11	MANUAL, INSTRUCTION (UK) (ENGLISH)
3-758-285-21	MANUAL, INSTRUCTION (D550) (ENGLISH)
3-758-285-31	MANUAL, INSTRUCTION (CA) (ENGLISH , FRENCH)
3-758-285-41	MANUAL, INSTRUCTION (AEP) (ENGLISH , FRENCH , SPANISH , PORTUGUESE)
3-758-285-51	MANUAL, INSTRUCTION(AEP,G) (GERMAN , DUTCH , SWEDISH , ITALIAN)
3-758-285-61	MANUAL, INSTRUCTION(AEP) (DANISH , FINNISH)
3-758-285-71	MANUAL, INSTRUCTION(E,AU,PX) (ENGLISH , FRENCH , SPANISH , CHINESE)
3-758-285-81	MANUAL, INSTRUCTION (MX) (SPANISH)

	Part No.	Description
*	4-963-189-01	INDIVIDUAL CARTON(UK)
*	4-963-192-01	INDIVIDUAL CARTON(AEP,G)
*	4-963-193-01	INDIVIDUAL CARTON(D550)
*	4-963-196-01	INDIVIDUAL CARTON(CA,AU,PX)
*	4-963-197-01	INDIVIDUAL CARTON(E)
*	4-966-411-01	INDIVIDUAL CARTON(MX)
	A-4674-087-A	TURN TABLE MAT ASSY(PS-LX56P)
	1-467-430-11	COMMANDER , STANDARD (RM-S221)(HCD)
	2-181-754-21	COVER(MLY), BATTERY(RM-S221)
*	3-376-136-01	CUSHION(CASSETTE HALF)(HCD)
*	4-947-532-01	SNOW BOX (L)(PS-LX56P)
*	4-947-533-11	SNOW BOX (R)(PS-LX56P)
*	4-963-173-02	CUSHION(HCD)
*	4-964-536-11	CUSHION(SS-D290/D555)

NOTE :
● Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

COMPACT HI-FI STEREO SYSTEM

SONY®

Sony Corporation
Audio Group

9-959-359-11

English
94A04101-1D
Printed in Japan

© 1994.1

Published by Audio Sector Quality Assurance Dept.

HCD-A295/D550

SERVICE MANUAL

US Model
HCD-D550
Canadian Model
AEP Model
UK Model
E Model
Australian Model
PX Model
HCD-A295

Photo : HCD-A295

HCD-A295 and HCD-D550 is the tuner, deck, CD and amplifier section in LBT-A295 and LBT-D550 respectively.

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION :
With 8-ohm loads, both channels driven, from 70—20,000Hz ; rated 100 watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier

Continuous RMS power output
10W+10W (6 ohms, at 1kHz, 5% THD)

Input	Jack type	Sensitivity	Impedance
VIDEO	Phono	300 mV	47 kilohms
PHONO	Phono	3 mV	47 kilohms

Output	Jack type	Impedance
SURROUND SPEAKER (Except US, CND)	Phono	Accepts speakers of 8—16 ohms
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response 15Hz to 50kHz $^{+0}_{-3}$ dB

Tuner

System FM stereo
FM/AM superheterodyne tuner

CD Section	Model Name Using Similar Mechanism	CDP-411/511/D7
	CD Mechanism Name	CDM14-5BD13
	Base Unit Name	BU-5BD13
DECK Section	Model Name Using Similar Mechanism	HTC-D159
	Tape Transport Mechanism Type	TCM-180VW-H11

FM tuner section
Tuning range 87.5 to 108MHz
Antenna 300 ohms balanced
75 ohms unbalanced
Intermediate frequency 10.7MHz

AM tuner section
Tuning range AM : 530 to 1,710kHz (US, CND)
MW : 531 to 1,602kHz (Except US, CND, IT)
MW : 522 to 1,611kHz (IT)
LW : 153 to 279kHz (AEP, UK)
Antenna AM loop antenna
External antenna terminal
Intermediate frequency 450kHz

Cassette deck

Recording system 4-track 2-channel stereo
Frequency response DOLBY NR OFF
(Except E, AUS, MX, PX)
With Type II cassette (Sony UX-S)
40Hz to 14kHz (±3dB)
With Type I cassette (Sony HF-S)
40Hz to 13kHz (±3dB)
Wow and flutter 0.1% (WRMS) (D550)
W. PEAK±0.2% (DIN) (A295)

—continued on next page—

使用時は添付資料も参照のこと
Refer to the additional documents.

COMPACT DISC DECK RECEIVER

SONY®

Compact disc player

Laser	Semiconductor laser
Wavelength	780—790nm
Frequency response	2Hz to 20kHz ±0.5dB (A295) 2Hz to 20kHz ±1dB (D550)
Signal-to-noise ratio	More than 93dB
Dynamic range	More than 90dB
Harmonic distortion	Less than 0.008% (1kHz) (A295) Less than 0.01% (1kHz) (D550)
Channel separation	More than 90dB (1kHz)

General

Power requirements	120V AC, 60Hz (US, CND) 220—230V AC, 50/60Hz (AEP, G, IT) 240V AC, 50Hz (UK) 110—120V/220—240V AC, 50/60Hz (E, PX) 240V AC, 50/60Hz (AUS) 120V AC, 50/60Hz (MX)
Power consumption	105W (A295) 180W (D550)
Mass	Approx. 10.9kg (24 lb 5 oz) (A295) Approx. 12kg (26 lb 8 oz) (D550)
Dimensions	Approx. 355×395×405mm ($14\times15\frac{5}{8}\times16$ inches) (w/h/d, including projections)

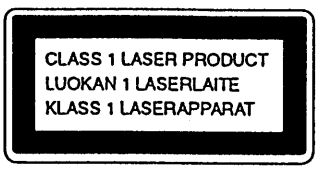
Supplied accessories

Remote commander RM-S221	(1)
Batteries Sony SUM-3 (NS)	(2)
FM wire antenna	(1)
AM loop antenna	(1)
45-rpm adaptor	(1) (AEP2, UK, G: Supplied with the turntable)

Design and specifications are subject to change without notice.

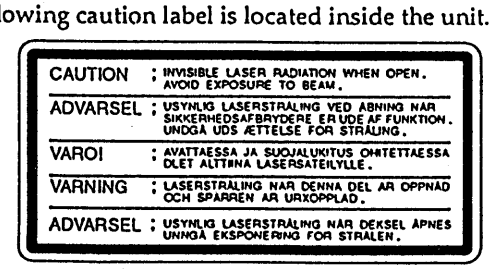
- Abbreviations
  CND: Canadian model
  G : German model
  IT : Italian model
  MX : Mexican model
  AUS : Australian model

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.



Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.


CAUTION ; INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL ; USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VAROI ; AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSATEILYLLE.
VARNING ; LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD.
ADVARSEL ; USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

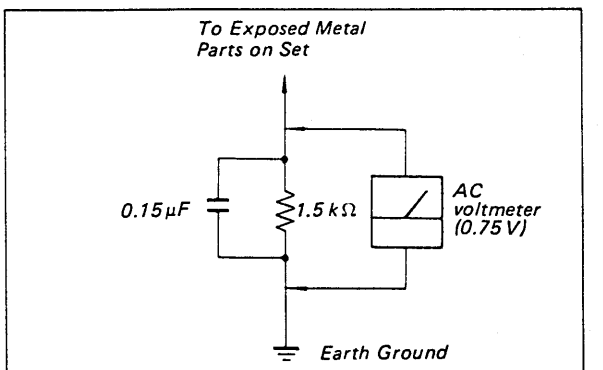


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

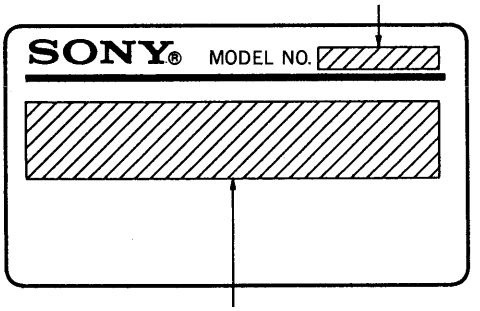
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

MODEL IDENTIFICATION

—Label Model Number—

Canadian, AEP, G, IT, UK, E, MX, PX, AUS model: HCD-A295
US model: HCD-D550



US model	: COMPACT DISC DECK RECEIVER AC: 120V 60Hz 180W
Canadian model	: COMPACT DISC DECK RECEIVER AC: 120V 60Hz 105W
AEP, Italian model	: COMPACT DISC DECK RECEIVER AC: 220—230V~50/60Hz 105W
German model	: COMPACT HIFI STEREO SYSTEM COMPACT DISC DECK RECEVIER HCD-A295 STEREO TURNTABLE SYSTEM PS-LX56P AC: 220—230V~50/60Hz 105W
UK model	: COMPACT DISC DECK RECEIVER AC: 240V~50Hz
E, PX model	: COMPACT DISC DECK RECEIVER AC: 110—120V/220—240V~50/60Hz 105W
Australian model	: COMPACT DISC DECK RECEIVER AC: 240V~50/60Hz 105W
Mexican model	: COMPACT DISC DECK RECEIVER AC: 120V~50/60Hz 105W

• Abbreviations
AEP2: AEP unit with PHONO POWER SOURCE

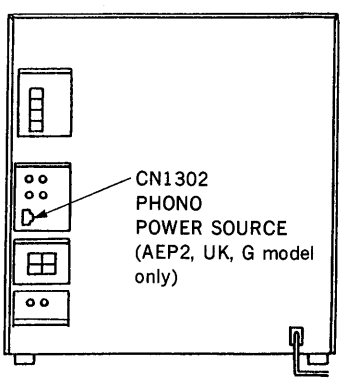
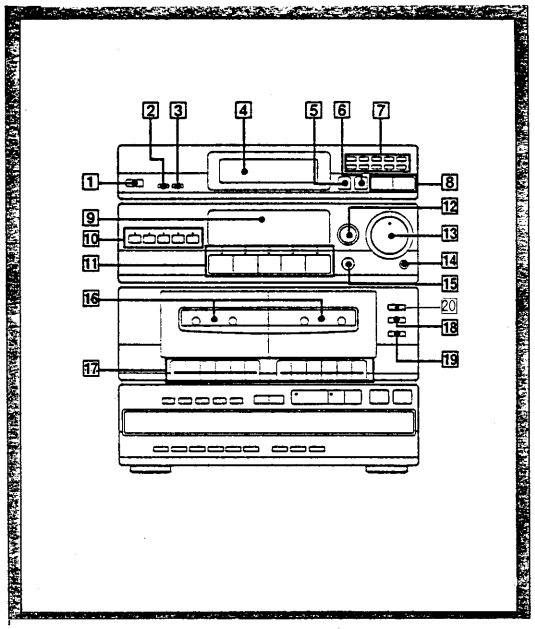


TABLE OF CONTENTS

Section	Title	page
1.	**GENERAL**	
	Location of Controls	5
2.	**DISASSEMBLY**	
2-1.	Case (CDM)	6
2-2.	Back Panel	6
2-3.	Main Board	7
2-4.	Power Transformer	7
2-5.	CD Assy	8
2-6.	Cassette Lid Assy	8
2-7.	Mechanism Deck Block	9
2-8.	Panel Board	9
2-9.	Disc Table Assy	10
2-10.	Bracket (BD) Assy	10
3.	**Mechanical Adjustments**	11
4.	**Electrical Adjustments**	
	Deck Section	11
	Tuner Section	14
	CD Section	15
5.	**DIAGRAMS**	
5-1.	Block Diagram—Deck Section—	17
5-2.	Block Diagram—CD Section—	19
5-3.	Block Diagram—Tuner/Power/Panel Section—	21
5-4.	Circuit Boards Location	24
5-5.	Printed Wiring Boards—Tuner/Power Section—	27
5-6.	Shematic Diagram—Power Section—	31
5-7.	Schematic Diagram—Tuner Section—	36
5-8.	Schematic Diagram—CD Section—	38
5-9.	Printed Wiring Boards—CD Section—	41
5-10.	Semiconductor Lead Layouts	45
5-11.	Printed Wiring Boards—Deck Section—	47
5-12.	Schematic Diagram—Deck Section—	49
5-13.	Schematic Diagram—Panel Section—	52
5-14.	Printed Wiring Board—Panel Section—	55
5-15.	Pin Description	62
6.	**EXPLODED VIEWS**	
6-1.	Chassis Section	64
6-2.	Front Panel Section	66
6-3.	Tray Section	68
6-4.	CD Chassis Section	69
6-5.	Optical Pick-up Block	70
6-6.	Mechanism Deck Section 1	71
6-7.	Mechanism Deck Section 2	72
6-8.	Mechanism Deck Section 3	73
7.	**ELECTRICAL PARTS LIST**	74

This section is extracted from instruction manual.



Location of Controls

Refer to the pages indicated in parentheses for details.

Tuner

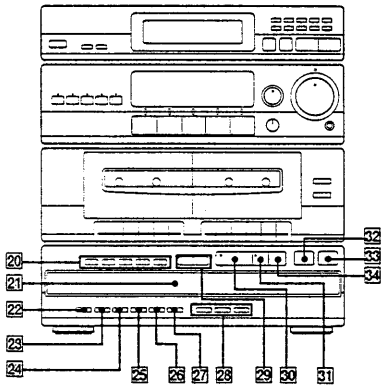
1 POWER switch (12)
2 MEMORY button (20)
3 STEREO/MONO button (16)
4 Display window
5 BAND button (16)
6 SHIFT button (20)
7 PRESET STATIONS numeric buttons (20)
8 DUAL MODE TUNING +/– buttons (16, 18, 20)

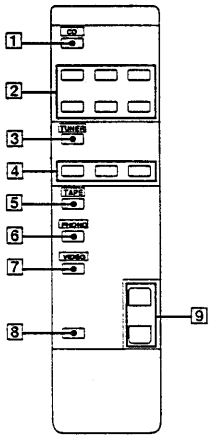
Amplifier

9 SPECTRUM ANALIZER display (14)
10 PRESET EQUALIZER buttons and indicators (14)
11 Function selectors and indicators
12 DBFB (dynamic bass feedback) control (14)
13 VOLUME control (14)
14 HEADPHONES jack (14)
15 SURROUND control (14)

Cassette Deck

16 Cassette holders
17 Tape operation buttons (22)
◄◄ Leftward fast winding
►► Rightward fast winding
► Forward play
■/⏏ Stop/eject
❚❚ PAUSE Pause
● REC Record
18 TAPE SELECT button (22, 24, 28)
19 DUBBING SPEED (HIGH/NORMAL) button (28)
20 DOLBY NR (noise reduction) (ON/OFF) switch (Except E, AUS, MX, PX)





Compact Disc Player

20 DISC SELECT 1-5 button (30, 34, 36, 38, 40)
21 Disc Tray
22 TIME button (32)
23 REPEAT button (46)
24 MUSIC SCAN button (44)
25 CHECK (program check) button (40)
26 CLEAR (program clear) button (40)
27 EDIT button (48)
28 PLAY MODE buttons
CONTINUE button (36, 40, 50)
SHUFFLE button (36)
PROGRAM button (38, 42)
29 ⏮ ◄◄/►► ⏭ (AMS*) buttons (34)
30 ► (play) button and indicator (30)
31 ❚❚ (pause) button and indicator (30)
32 DISC SKIP button (30, 34)
33 ⏏ OPEN/CLOSE button (30)
34 ■ (stop) button (30)

* AMS is the abbreviation of Automatic Music Sensor.

Remote Commander RM-S221

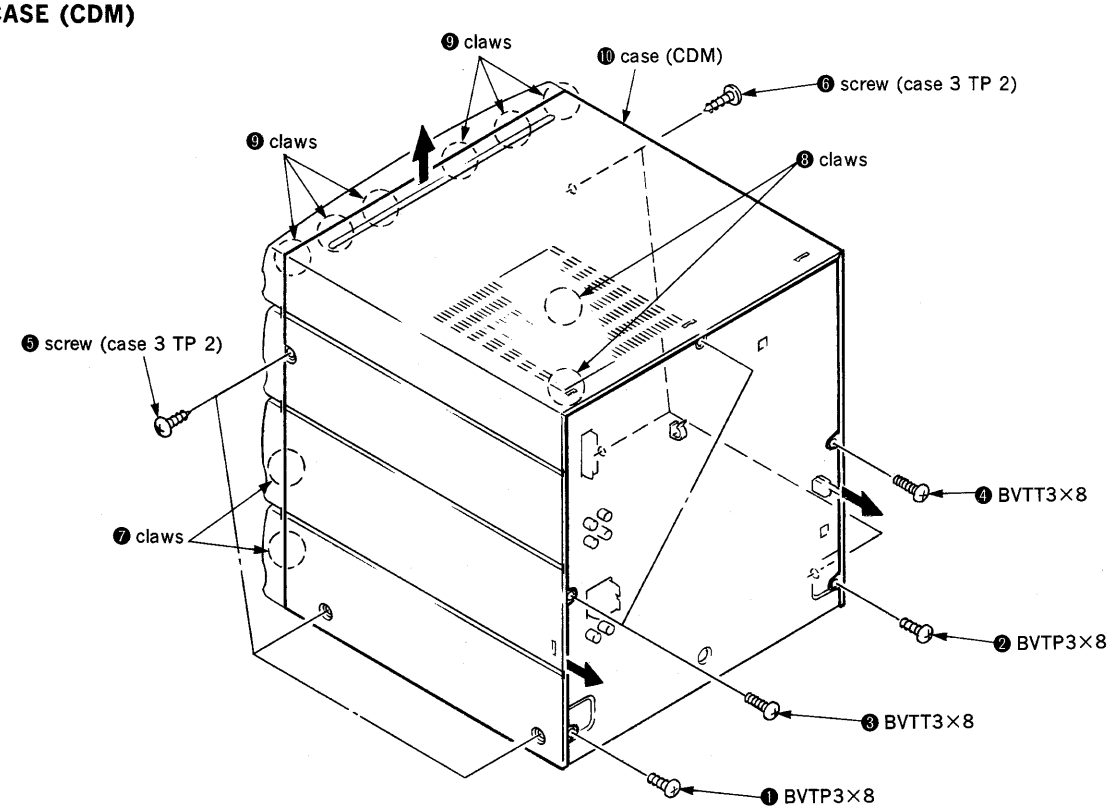
1 CD function button
2 CD operation buttons
DISC SKIP button, ⏮ / ⏭ (AMS*) buttons, ► (play) button, ❚❚ PAUSE button , ■ (stop) button
3 TUNER function button
4 Tuner operation buttons
SHIFT button
PRESET +/– butons
These buttons are used to select the preset station number.
5 TAPE function button
6 PHONO function button
7 VIDEO function button
8 SELECT 5 button
Each time the button is pressed, the preset equalization switches among 5 preset patterns (FLAT, DANCE, POPS, ROCK and CLASSIC).
9 VOL (volume) +/– buttons

* AMS is the abbreviation of Automatic Music Sensor.

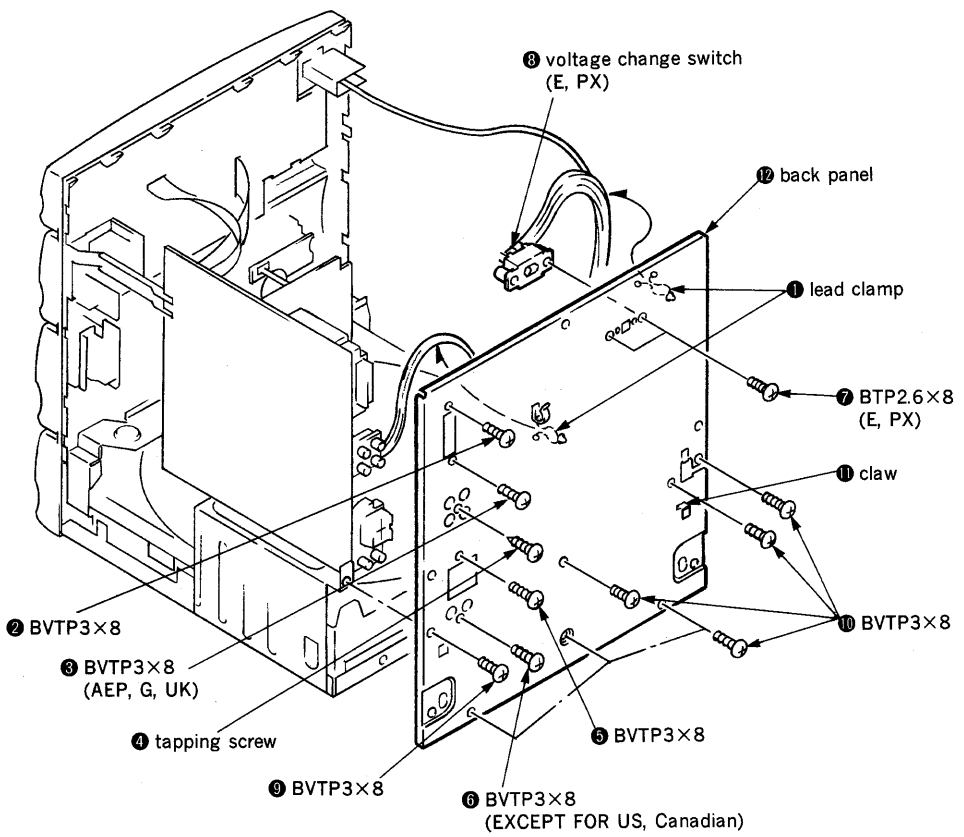
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

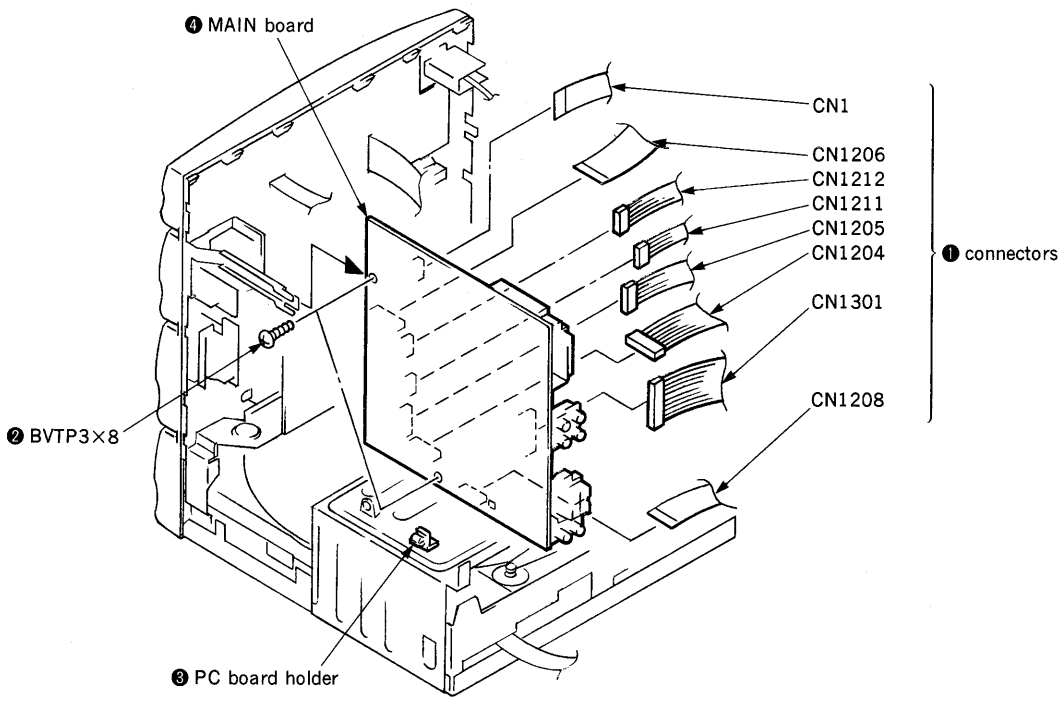
2-1. CASE (CDM)



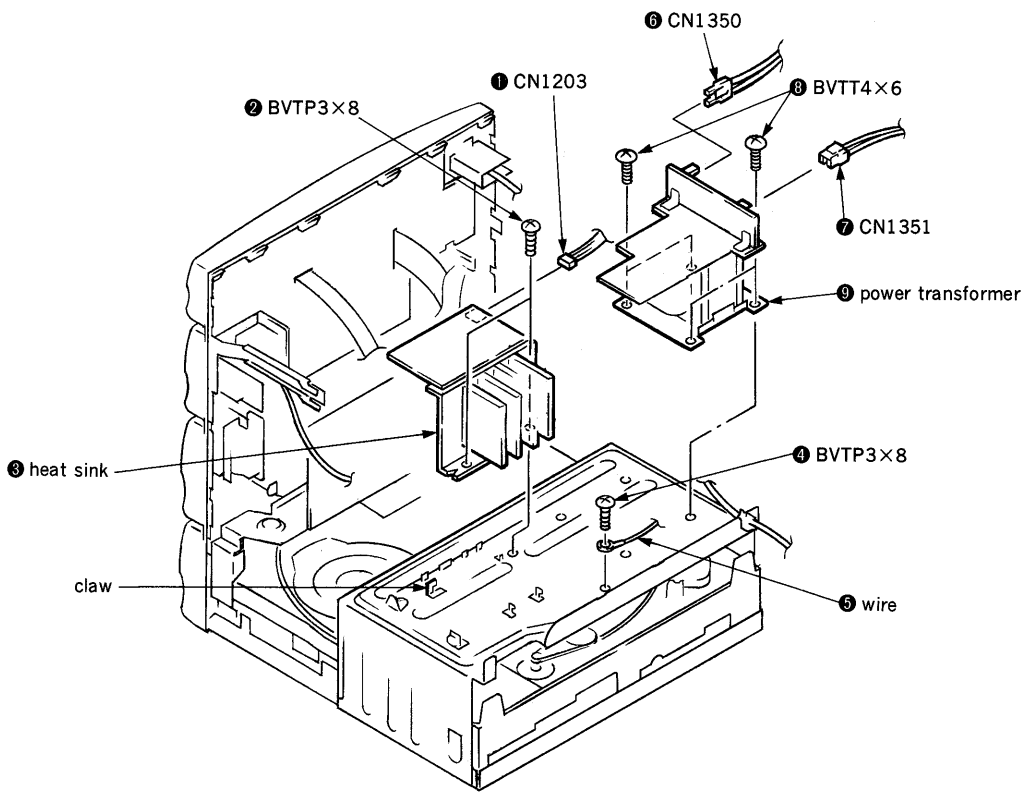
2-2. BACK PANEL



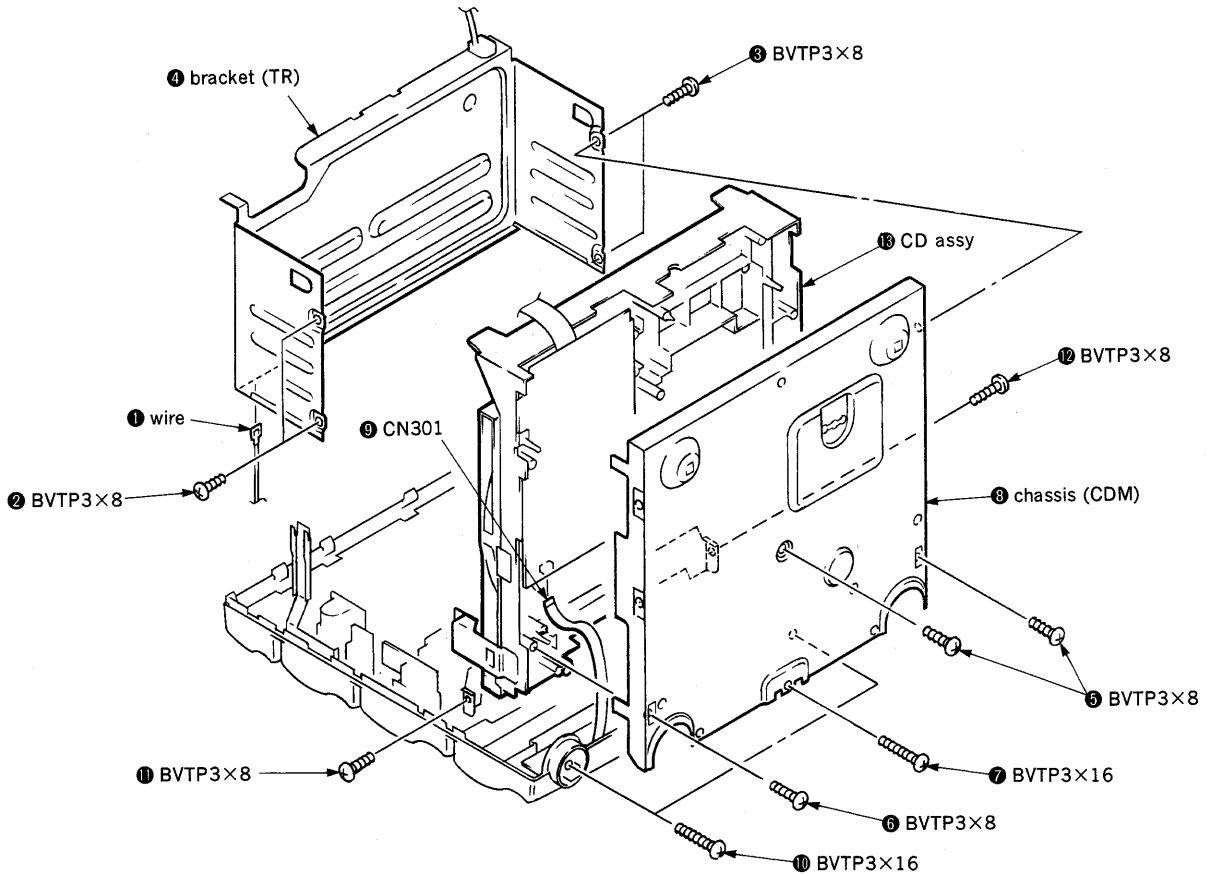
2-3. MAIN BOARD



2-4. POWER TRANSFORMER

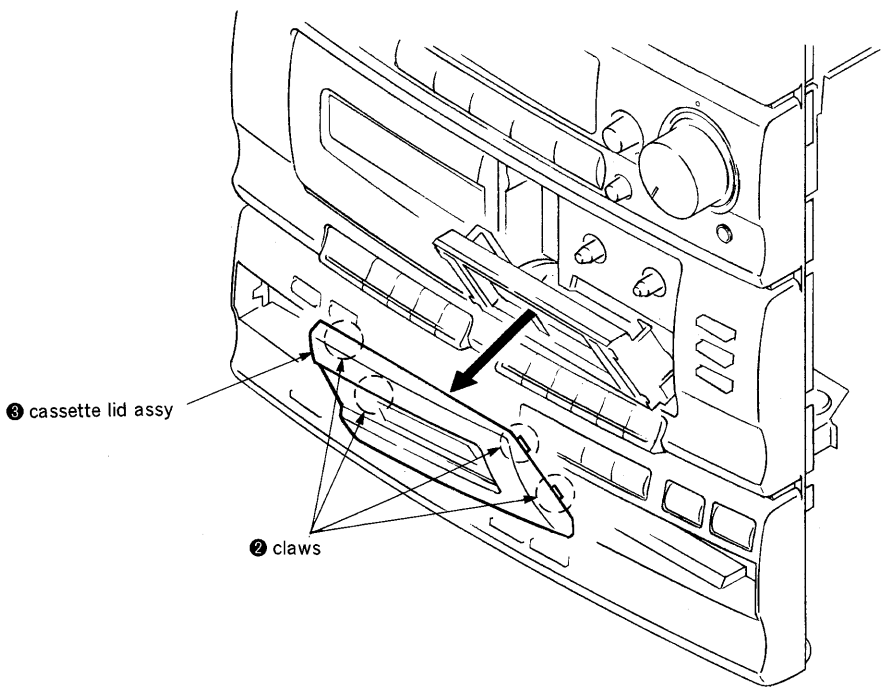


2-5. CD ASSY



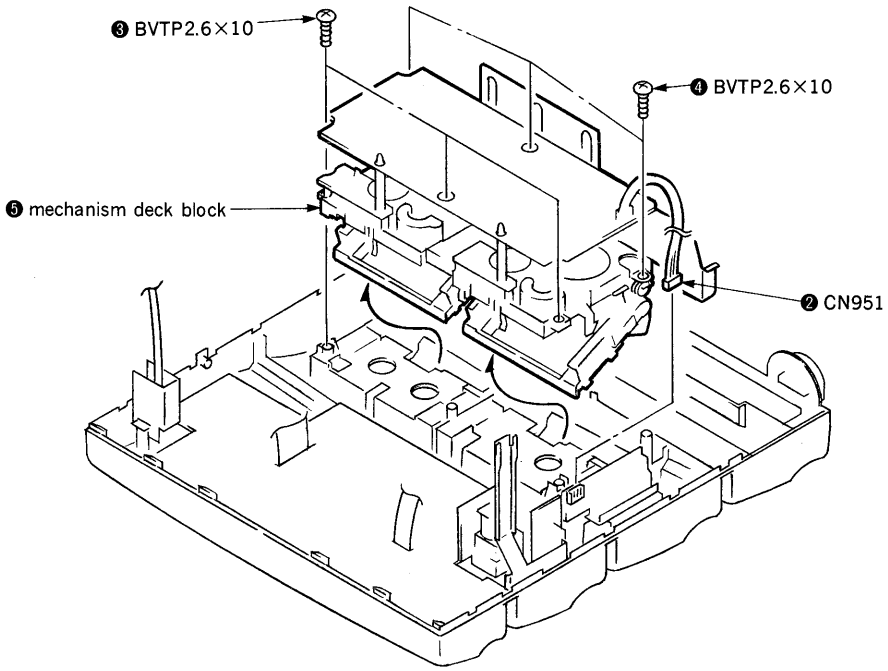
2-6. CASSETTE LID ASSY

❶ Push the EJECT button.

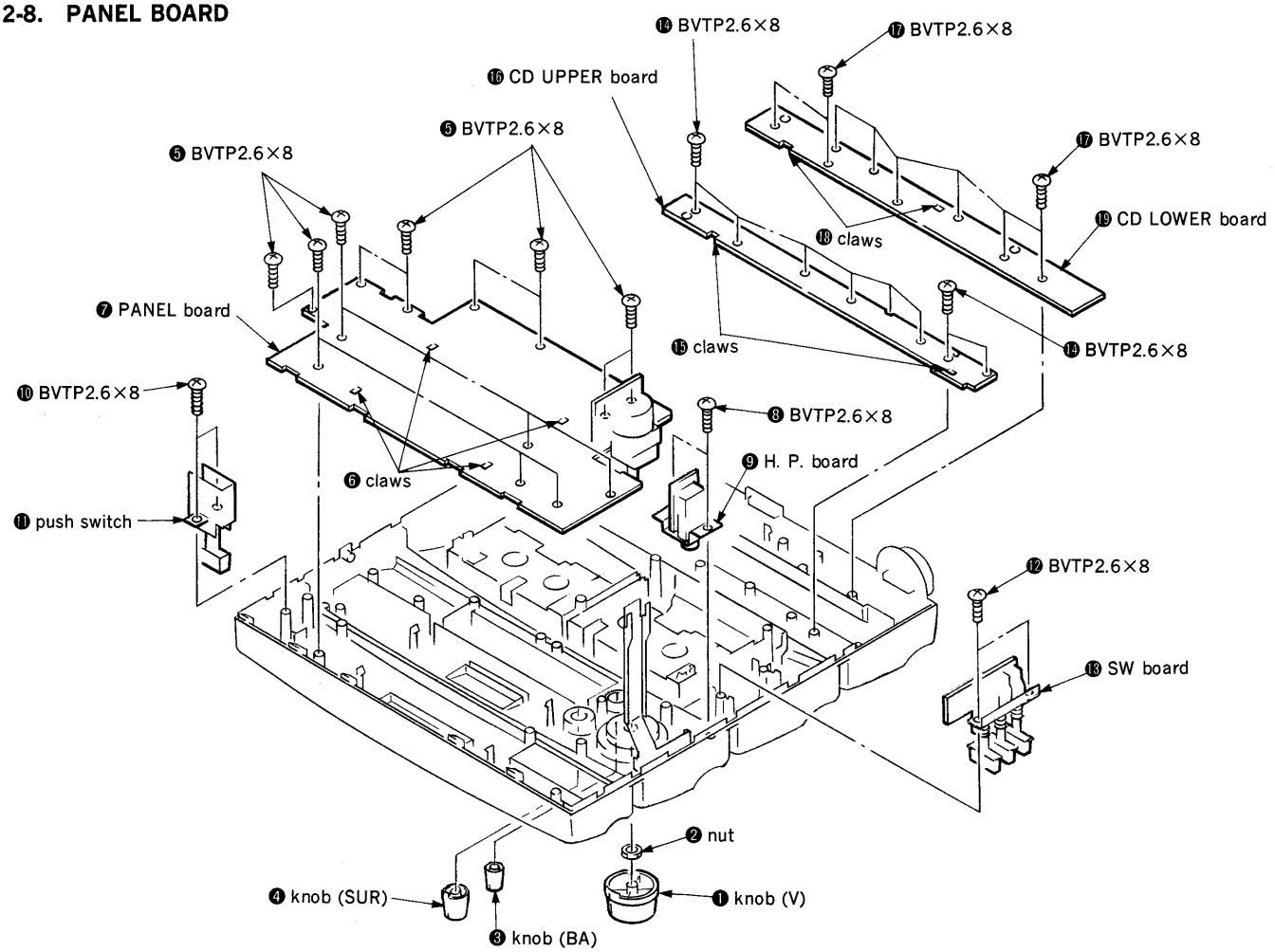


2-7. MECHANISM DECK BLOCK

❶ Push the EJECT button.

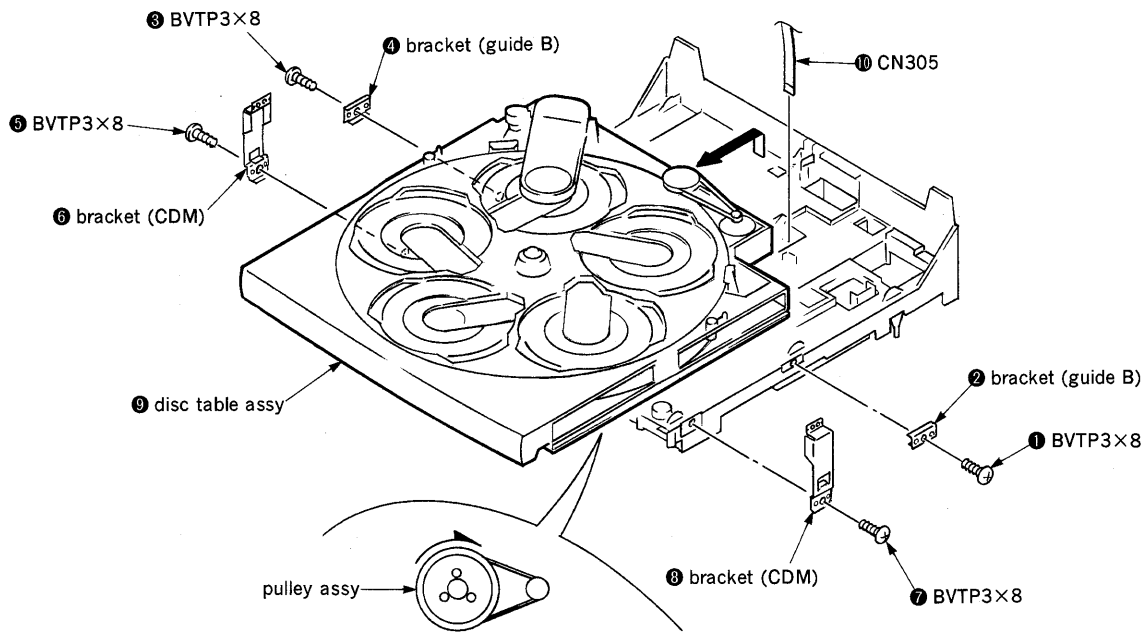


2-8. PANEL BOARD



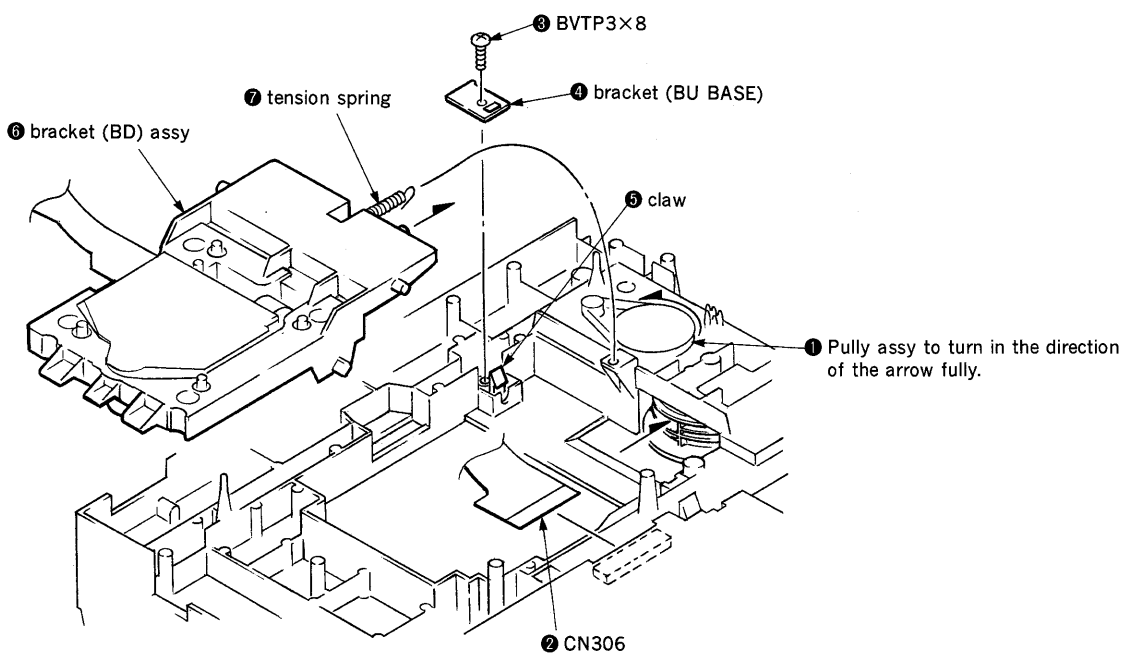
2-9. DISC TABLE ASSY

Note on assembly : Turn the pully assy in the direction of the arrow. Down the bracket (BD) assy, and assemble the disc table assy.



2-10. BRACKET (BD) ASSY

Note on assembly : Set to the arrow portion of gear (loading A) for shaft (CAM).


❸ BVTP3×8
❼ tension spring
❹ bracket (BU BASE)
❻ bracket (BD) assy
❺ claw
❶ Pully assy to turn in the direction of the arrow fully.
❷ CN306

SECTION 3
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab :
   record/playback heads　　pinch rollers
   erase head　　rubber belts
   capstan　　idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30−70g•cm (0.42−0.97oz•inch)
FWD Back tension	CQ-102C	1.5−5.5g•cm (0.020−0.076oz•inch)
FF/REW	CQ-201B	63g•cm or more (0.87oz•inch or more)

SECTION 4
ELECTRICAL ADJUSTMENTS

DECK SECTION **0dB=0.775V**

1. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.
  TAPE SELECT switch : TYPE I
  DOLBY NR switch : OFF (Except for E, Australian, Mexican, PX)

Type	Signal	Used for
P-4-A100	10kHz, −10dB	Azimuth Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment

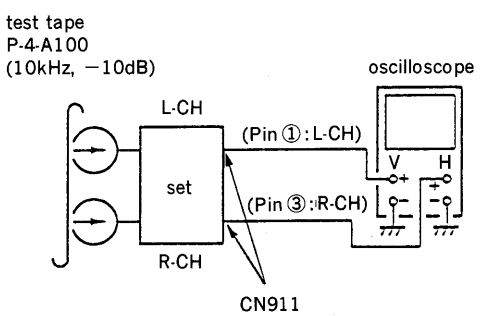
Record/Playback Head Azimuth Adjustment

DECK A **DECK B**

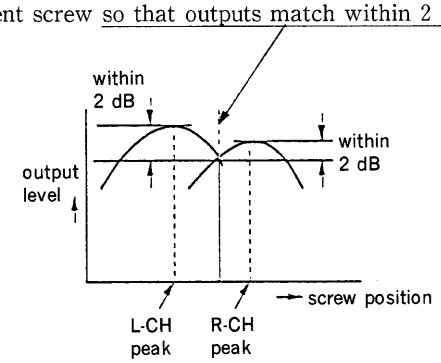
Note : Perform this adjustments for both decks.

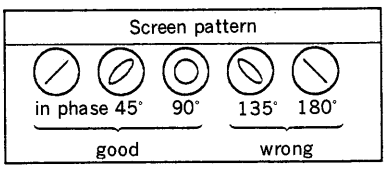
Procedure :

1. Mode : Playback



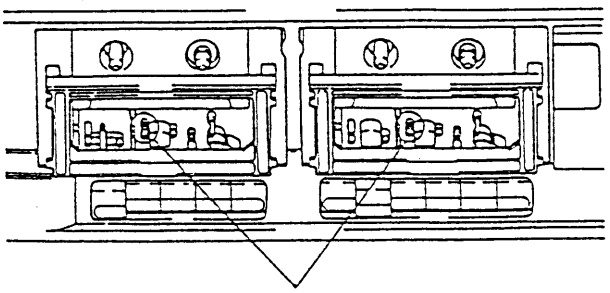
2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 2 dB of peak.





3. After the adjustments, apply suitable locking compound to the parts adjusted.

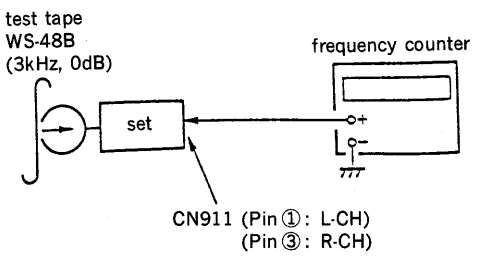
Adjustment Location :



Tape Speed Adjustment DECK A DECK B

Procedure :

Mode : Playback



High speed adjustment (Must be first Adjustment deck B)

1. Short pin CN912 on set "DUBBING SPEED" switch to "HIGH". Then at HIGH speed mode.
2. Adjust RV901 so that the frequency counter reads 6,000± 20Hz.

Normal speed adjustment

1. Remove the short pin from CN912 on set "DUBBING SPEED" switch to "NORMAL". Then at NORMAL speed mode.
2. Adjust RV902 so that the frequency counter reads 3,000± 10Hz.

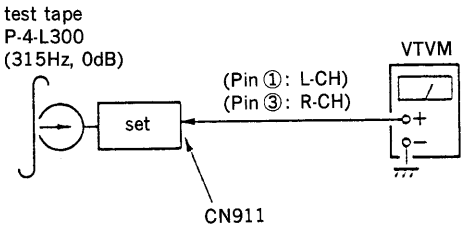
Frequency difference between deck A and deck B the beginning of the tape should be within ±1%.

Adjustment Location : main TC board

Playback Level Adjustment DECK A DECK B

Procedure :

Mode : Playback



Deck A side RV701 (L-CH), RV801 (R-CH)
Deck B side RV702 (L-CH), RV802 (R-CH)
so that the limits below are satisfied.

Adjustable limits :

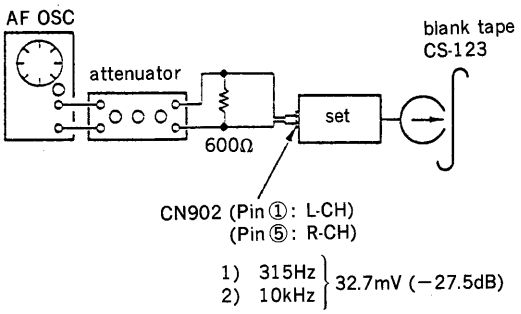
CN911 PB level : 366.7 to 411.4mV (−6.5 to −5.5dB)
level difference between the channels : within ±1dB

Adjustment Location : main TC board

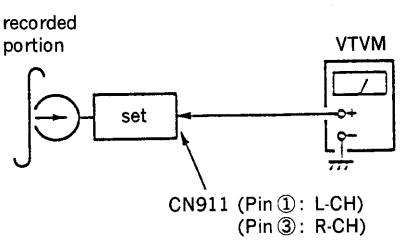
Record Bias Current Adjustment DECK B

Procedure :

1. Mode : record



2. Mode : Playback



Confirm playback the signal recorded in step 1 become adjustable level as follows.
If these levels do not adjustable level, adjustment the RV704 (L-CH) and RV804 (R-CH) to repeat step 1 and 2.

Adjustable level : Playback output of 315Hz to playback output of 10kHz : 0±0.5dB

Adjustment Location : main TC board

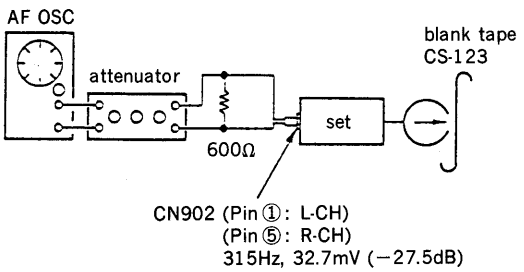
Record Level Adjustment DECK B

Setting :

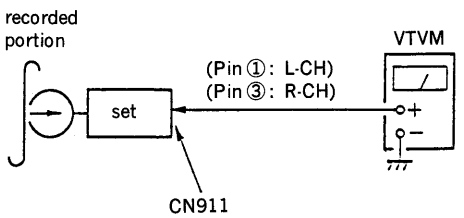
TAPE SELECT switch : TYPE I

Procedure :

1. Mode : record



2. Mode : playback



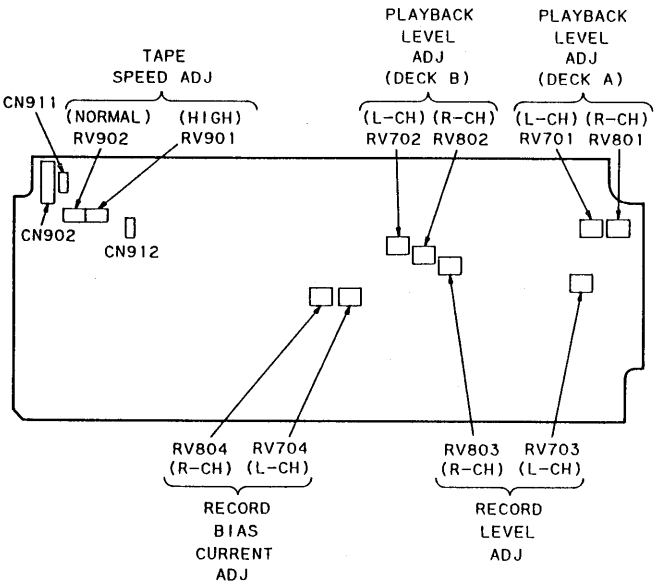
Confirm playback the signal recorded in step 1 become adjustable level as follows.
If these levels do not adjustable level, adjustment the RV703 (L-CH) and RV803 (R-CH) to repeat step 1 and 2.

Adjustable limits :

CN911 PB level : 30.9 to 34.6mV (−28 to −27dB)

Adjustment Location : main TC board

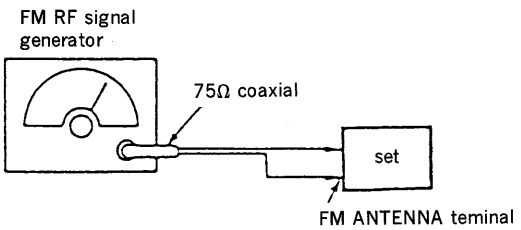
Adjustment Location : main TC board (component side)



TUNER SECTION | **0dB=1μV**

• FM SECTION

Setting :



Carrier frequency : 98MHz
Modulation : 1kHz, 75kHz deviation (US, Canadian)
1kHz, 40kHz deviation (Except US, Canadian)

FM Tuned Level Adjustment

Band : FM

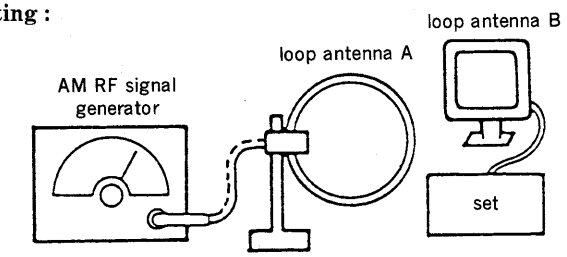
Procedure :

1. Supply a 17.8μV (25dBμ) 98MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust RV2 so that the TUNED indicator goes on.

Adjustment Location : main board

• AM SECTION

Setting :



AM (MW) Tuned Level Adjustment

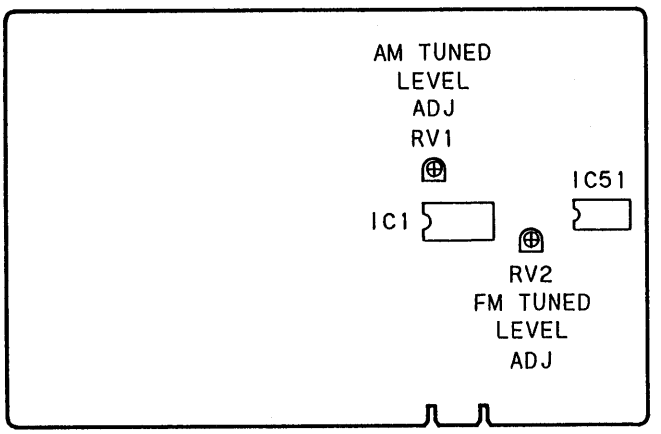
Band : AM or MW

Procedure :

1. Set loop antenna A so that the loop antenna B input level becomes 1.413mV (63dBμ).
2. Tune the set to 1,050kHz (US, Canadian) or 999kHz (Except US, Canadian).
3. Adjust RV1 so that the TUNED indicator goes on.

Adjustment Location : main board

Adjustment Location : main board (component side)

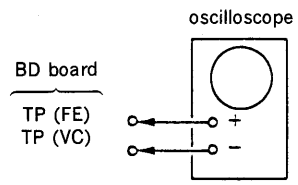


CD SECTION

Note :

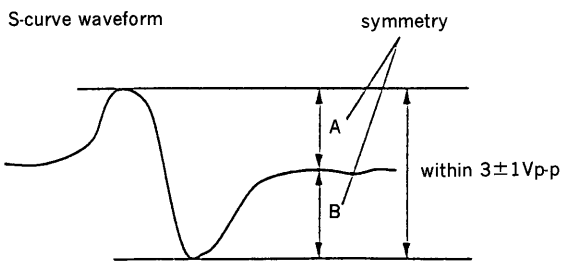
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an objective lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check



Procedure :

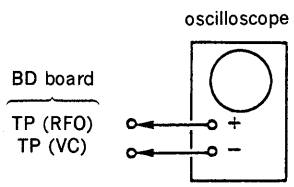
1. Connect oscilloscope to test point TP (FE) on BD board.
2. Connect between test point TP (FEI) and TP (VC) by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (Actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3±1Vp-p.



6. After check, remove the lead wire connected in step 2.

Note :
- Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

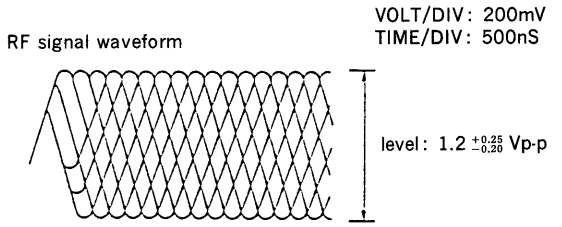
RF Level Check



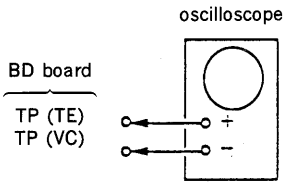
Procedure :

1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note : Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

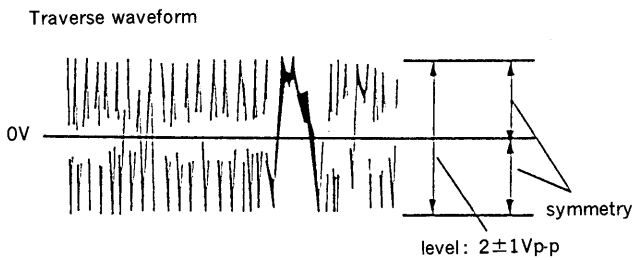


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) to ground and TP (TEI) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TE) on BD board.
3. Turned Power switch on.
4. Put disc (YEDS-18) is and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

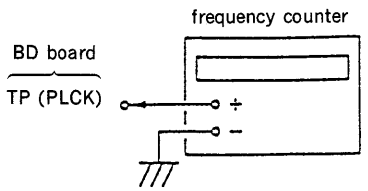


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PLCK) with lead wire.

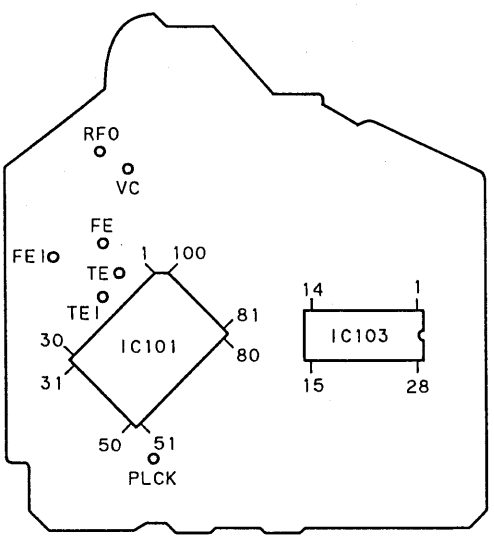


2. Turned Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

Adjustment Location :

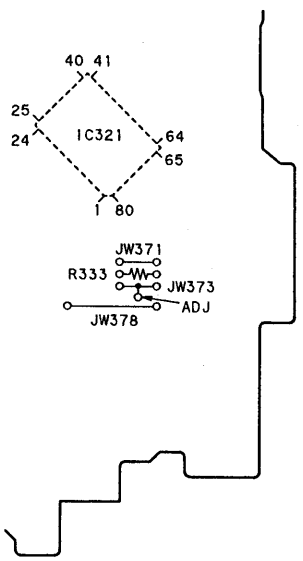
[BD BOARD]

—Side B—



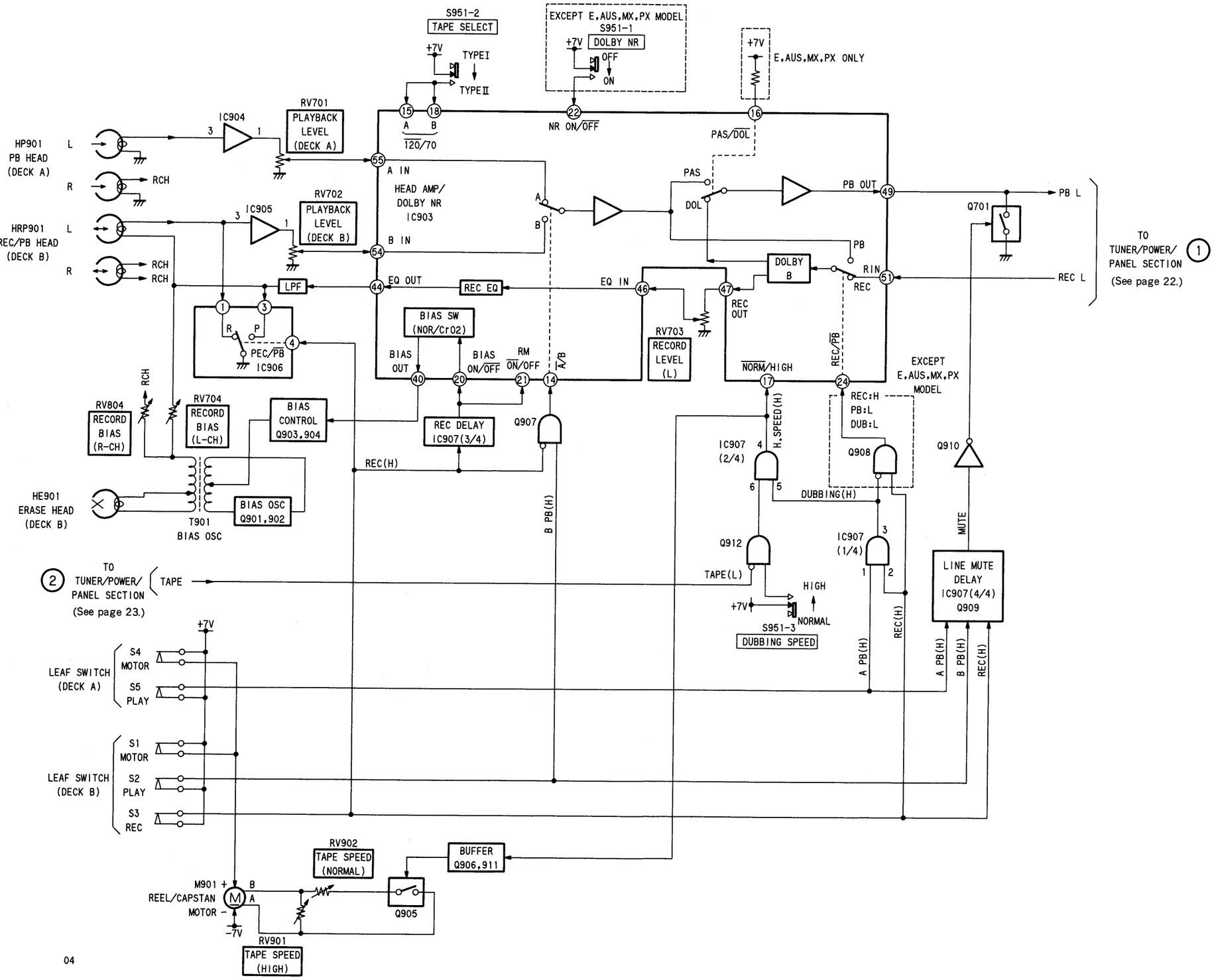
[CD MAIN BOARD]

—Component side—

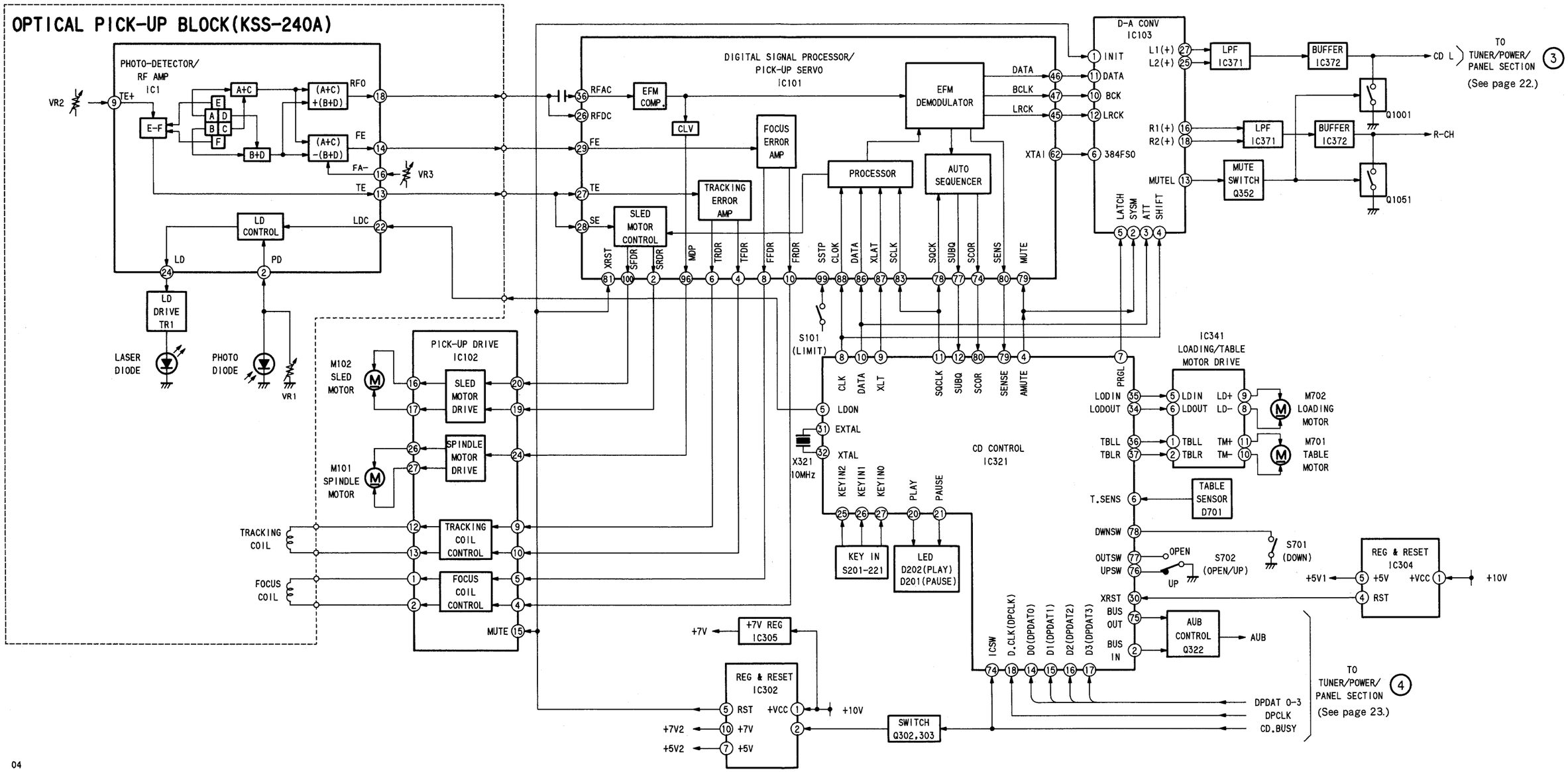


SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM—DECK SECTION—

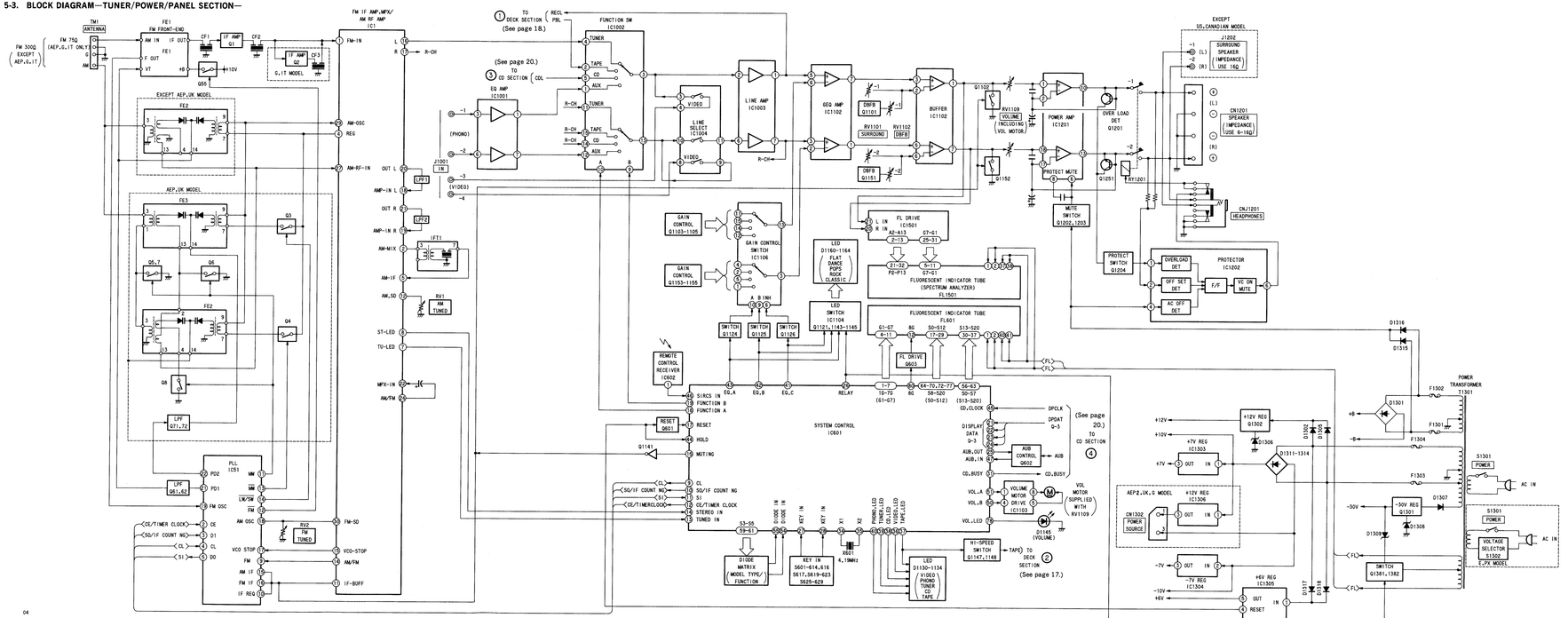


5-2. BLOCK DIAGRAM—CD SECTION—



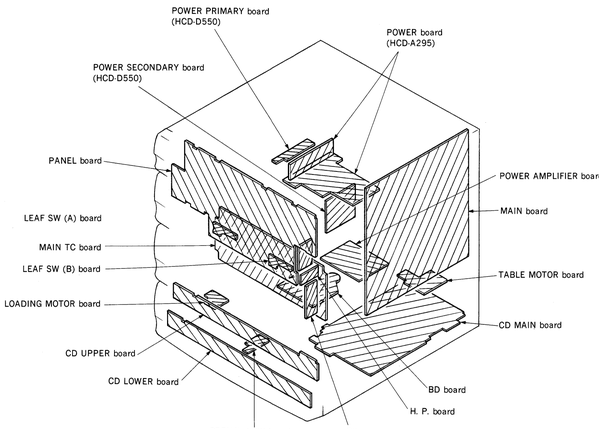
04

5-3. BLOCK DIAGRAM—TUNER/POWER/PANEL SECTION—



04

5-4. CIRCUIT BOARDS LOCATION



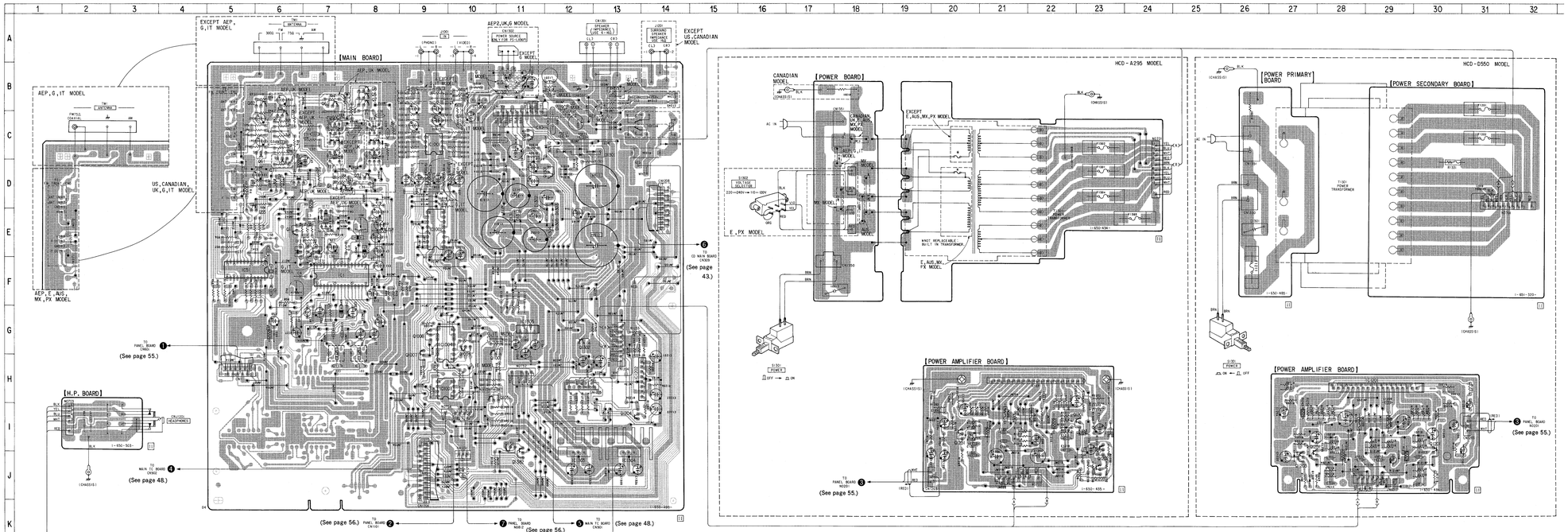
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D1	E-5	IC1202	H-13
D1201	I-21	IC1303	J-12
D1202	C-14	IC1304	J-13
D1204	H-13	IC1305	G-11
D1210	J-27	IC1306	B-10
D1211	J-27		
D1251	I-20	Q1	E-6
D1301	C-12	Q2	E-7
D1302	E-12	Q3	D-8
D1303	E-12	Q4	D-7
D1304	E-12	Q5	B-8
D1305	E-12	Q6	B-7
D1306	H-12	Q7	B-8
D1307	C-11	Q8	B-8
D1308	D-11	Q55	D-5
D1309	D-11	Q61	C-6
D1310	F-11	Q62	B-6
D1311	E-11	Q71	D-6
D1312	E-11	Q72	C-6
D1313	D-10	Q1001	G-10
D1314	D-10	Q1006	G-10
D1315	C-12	Q1007	G-9
D1316	C-12	Q1008	G-9
D1317	D-10	Q1051	H-10
D1318	C-10	Q1201	I-22
D1385	J-13	Q1202	J-23
		Q1203	J-23
IC1	F-7	Q1204	I-13
IC51	F-5	Q1251	I-20
IC1001	C-9	Q1301	D-12
IC1002	E-9	Q1302	G-12
IC1003	H-9	Q1381	I-11
IC1004	G-9	Q1382	I-11
IC1201	H-21	Q1383	C-11

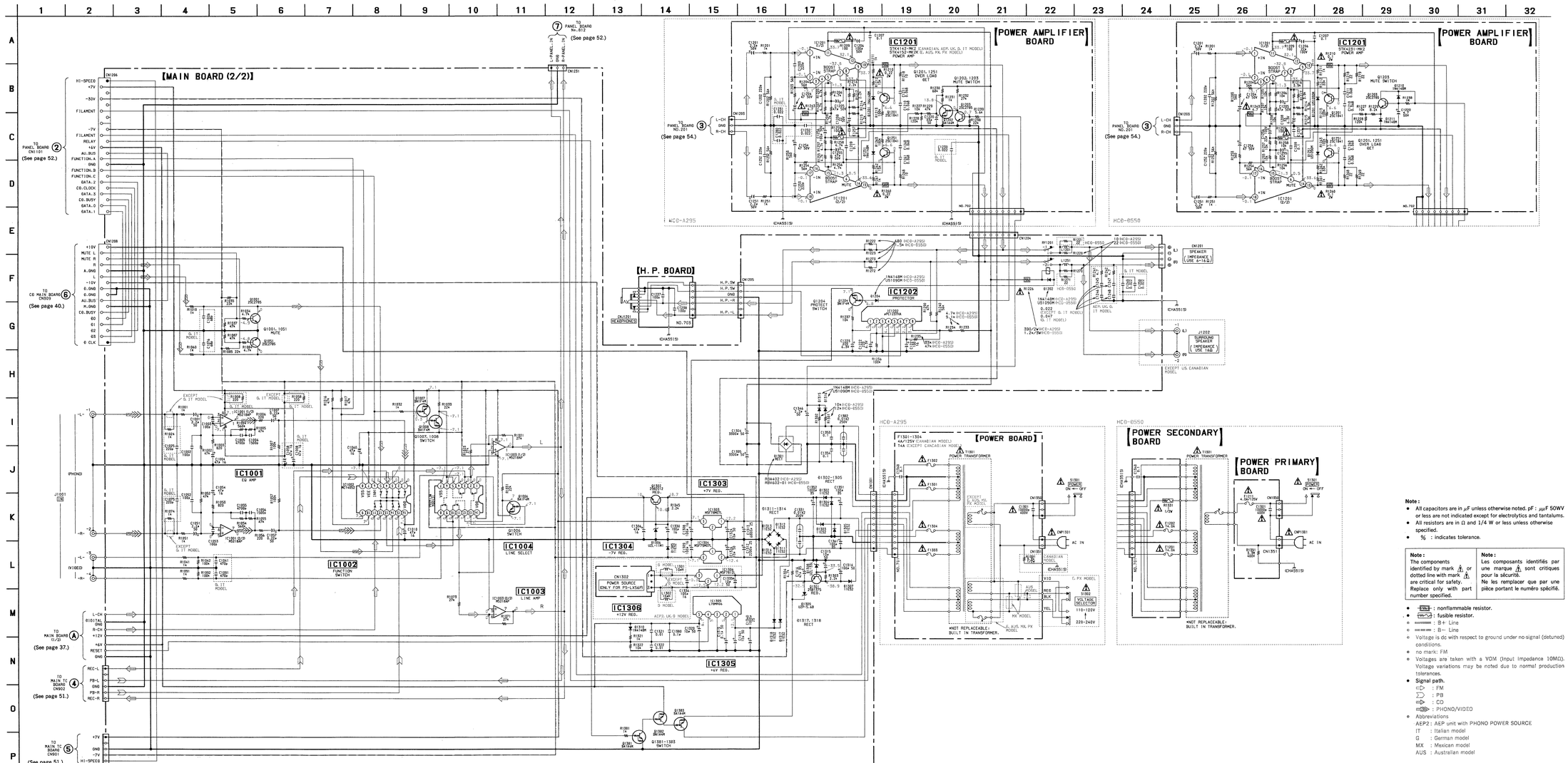
Note :

- ○— : parts extracted from the component side.
- ⬚ : indicates side identified with part number.
- ▩ : Pattern on the side which is seen.
- Abbreviations
  - AEP2 : AEP unit with PHONO POWER SOURCE
  - IT : Italian model
  - G : German model
  - MX : Mexican model
  - AUS : Australian model

5-5. PRINTED WIRING BOARDS—TUNER/POWER SECTION— • Refer to page 45 for Semiconductor Lead Layouts.



5-6. SCHEMATIC DIAGRAM—POWER SECTION— • Refer to page 58 for IC Block Diagrams.



Note :
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.

Note :	Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

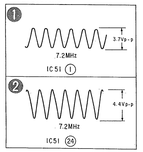
- : nonflammable resistor.
- : fusible resistor.
- e ═══ : B+ Line
- e ═══ : B– Line
- e Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- e Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - : FM
  - : PB
  - : CD
  - : PHONO/VIDEO
- e Abbreviations
  - AEP2: AEP unit with PHONO POWER SOURCE
  - IT : Italian model
  - G : German model
  - MX : Mexican model
  - AUS : Australian model

Note :
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.

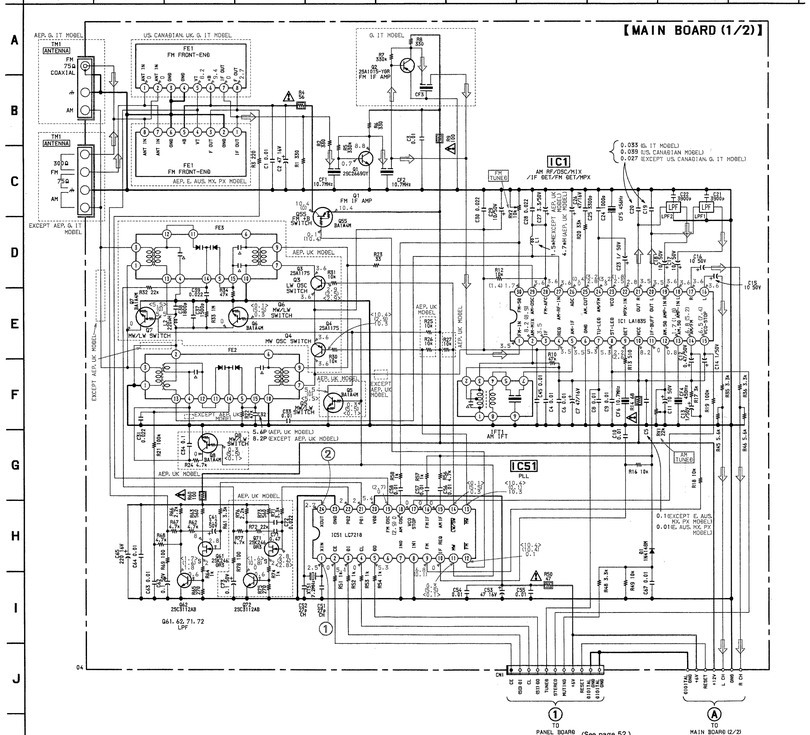
Note :	Note :
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▪ : nonflammable resistor.
- ▬ : B+ Line
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
  ( ): MW
  < >: LW
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ⇨ : MW
- Abbreviations
  IT : Italian model
  G : German model
  MX : Mexican model
  AUS : Australian model

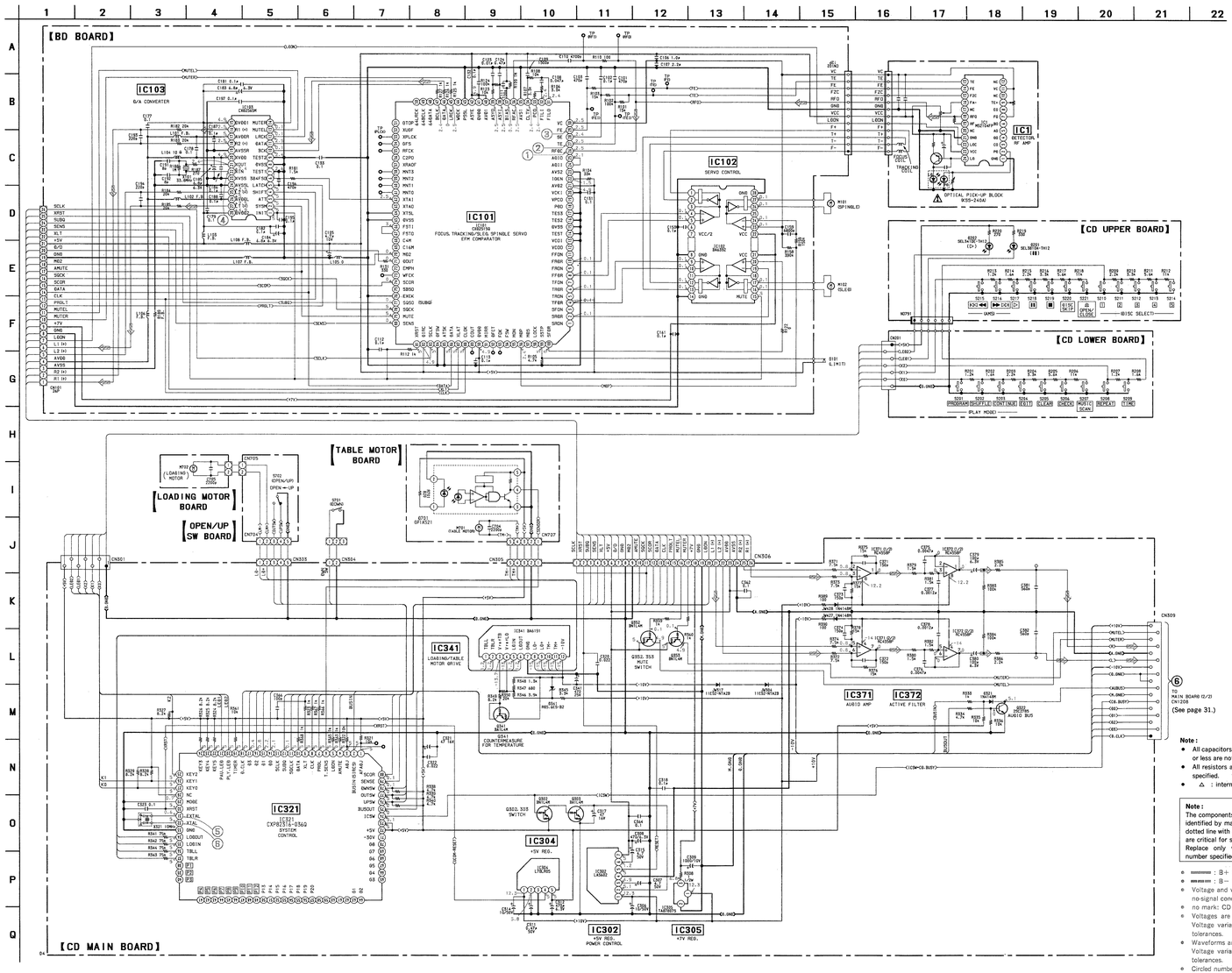
● Waveforms



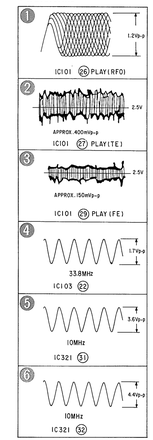
5-7. SCHEMATIC DIAGRAM—TUNER SECTION— • Refer to page 58 for IC Block Diagrams.



5-8. SCHEMATIC DIAGRAM—CD SECTION— • Refer to page 58 for IC Block Diagrams.



● Waveforms



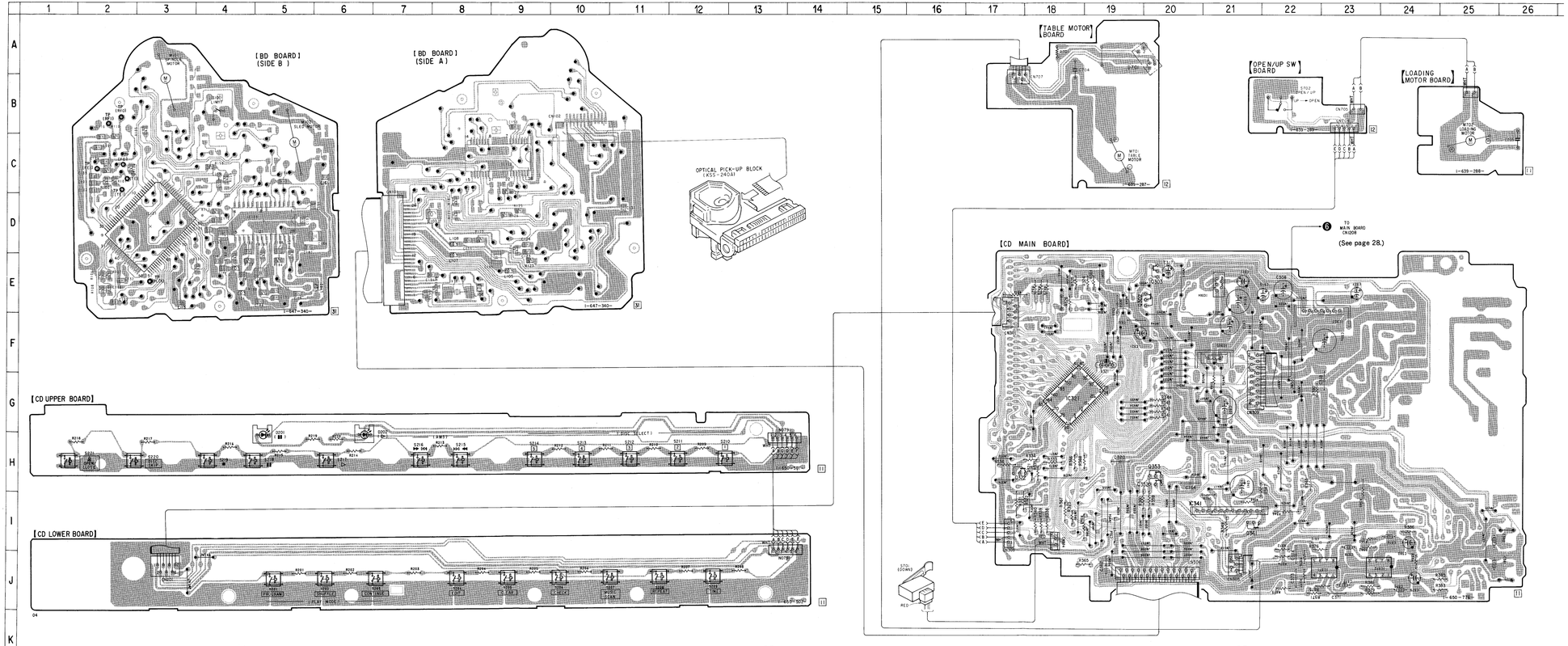
Note :
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.

Note :	Note :
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬ : B+ Line
- ▬▬ : B− Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: CD STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD

5-9. PRINTED WIRING BOARDS—CD SECTION—

• Refer to page 45 for Semiconductor Lead Layouts.



—41—

—42—

—43—

—44—

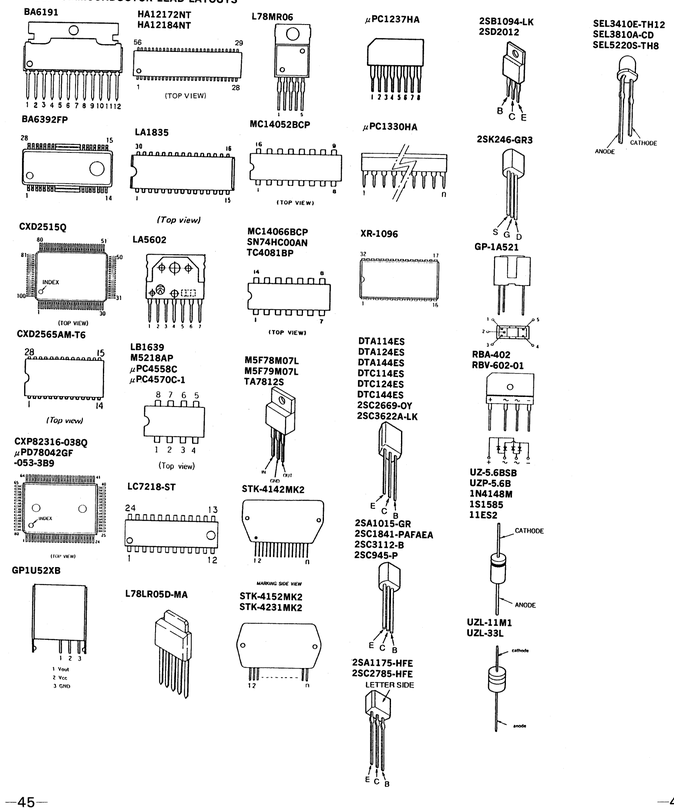
• Semiconductor Location

Ref. No.	Location
D201	H-5
D202	H-6
D321	H-17
D341	I-22
D701	A-19
IC101	D-3
IC102	C-8
IC103	D-4
IC302	F-23
IC304	E-20
IC305	F-21
IC321	G-18
IC341	I-20
IC371	J-22
IC372	J-23
JW304	G-22
JW317	H-22
JW427	J-21
JW428	I-23
Q302	E-19
Q303	E-19
Q322	H-17
Q341	I-20
Q351	H-20
Q353	H-20

Note :

- ○— : parts extracted from the component side.
- ● : Through hole.
- ▬ : Pattern on the side which is seen. (The other layer's patterns are not indicated.)

5-10. SEMICONDUCTOR LEAD LAYOUTS

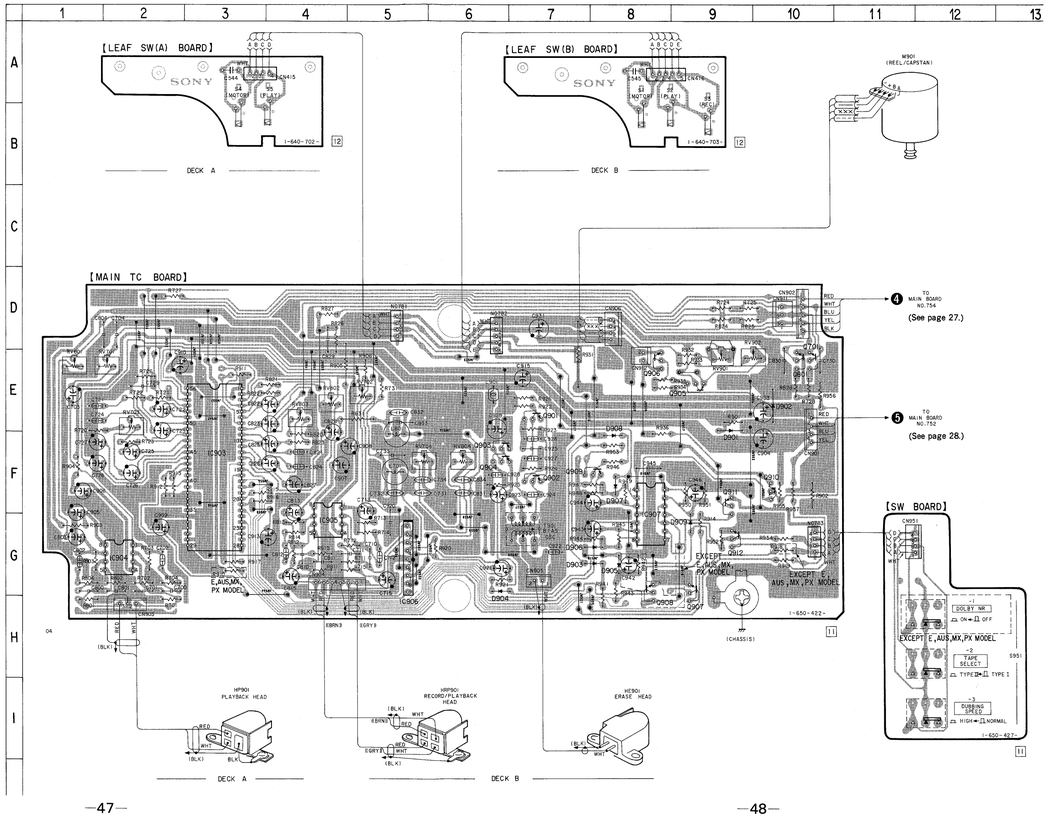


● Semiconductor Location

Ref. No.	Location
D901	E-9
D902	E-10
D903	G-7
D904	G-6
D905	G-8
D906	G-7
D907	F-8
D908	F-8
D909	G-9
IC903	F-3
IC904	G-3
IC905	G-4
IC906	G-5
IC907	F-8
Q701	E-10
Q801	E-10
Q901	E-7
Q902	F-7
Q903	F-6
Q904	F-6
Q905	E-9
Q906	E-8
Q907	G-9
Q908	G-8
Q909	F-7
Q910	F-10
Q911	F-8
Q912	G-9

Note :
- C— : parts extracted from the component side.
- ▒▒▒ : Pattern on the side which is seen.
- Abbreviations
  MX : Mexican model
  AUS : Australian model

5-11. PRINTED WIRING BOARDS—DECK SECTION—



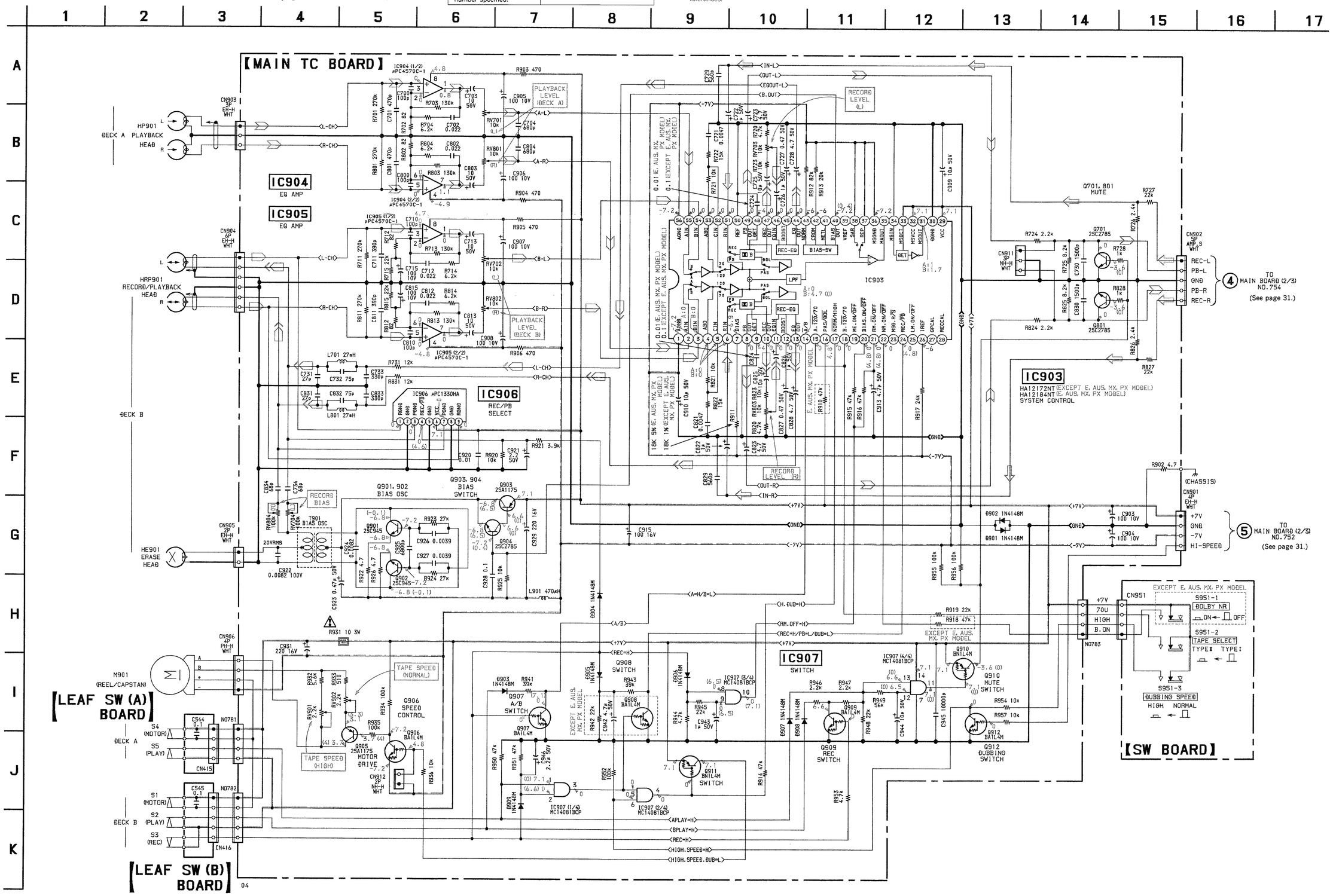
Note :
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

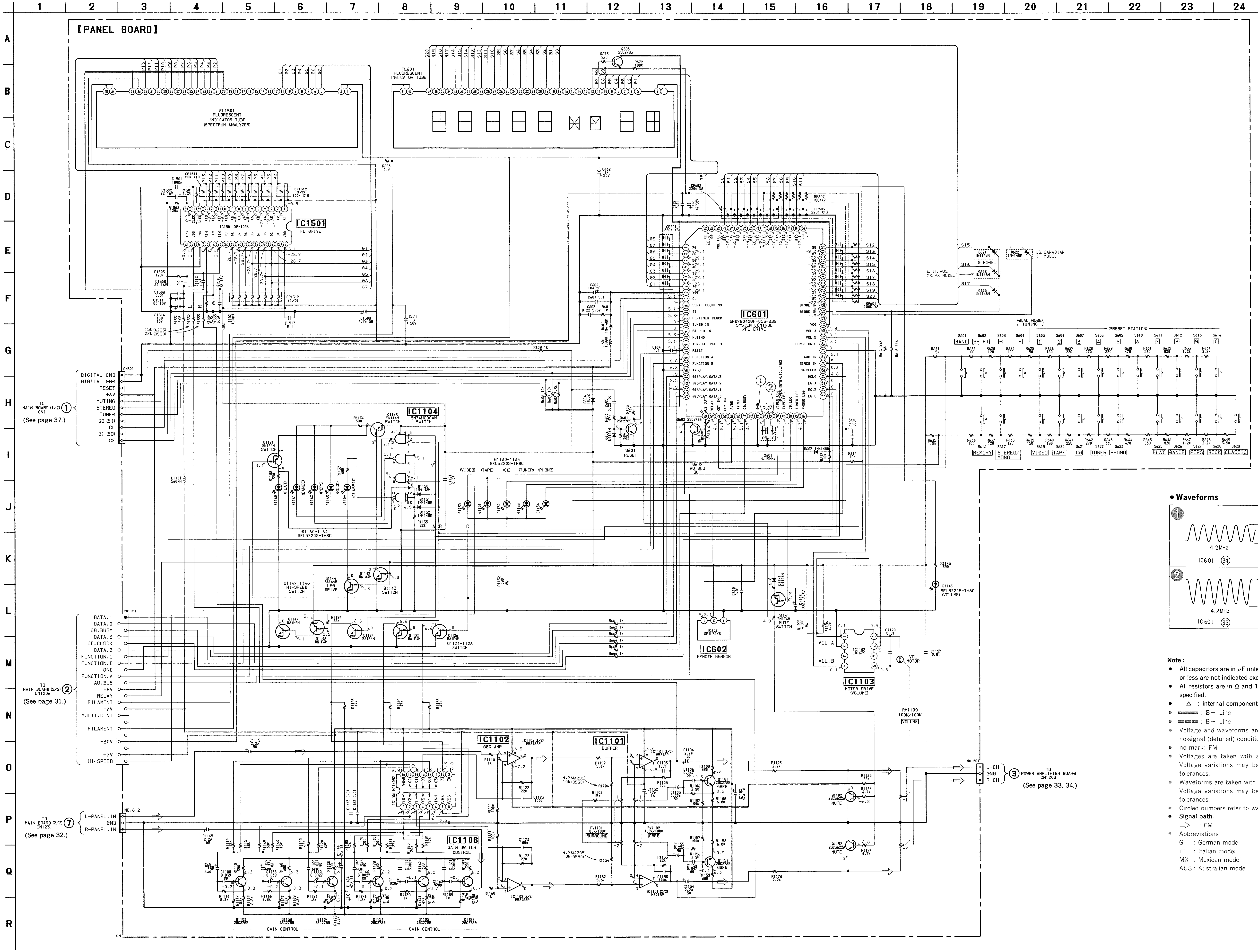
- ▭ : nonflammable resistor.
- ▭ : B+ Line
- ▭ : B− Line
- ▭ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal conditions.
- no mark: PB
  ( ): REC
  A : DECK A
  B : DECK B
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

- Signal path.
  ⇨ : FM
  ⇨ : PB (DECK A)
  ⇨ : PB (DECK B)
  ⇨ : REC (DECK B)
- Abbreviations
  MX : Mexican model
  AUS : Australian model

5-12. SCHEMATIC DIAGRAM—DECK SECTION— • Refer to page 58 for IC Block Diagrams.



5-13. SCHEMATIC DIAGRAM—PANEL SECTION— • Refer to page 58 for IC Block Diagrams.


【PANEL BOARD】
FL1501 FLUORESCENT INDICATOR TUBE (SPECTRUM ANALYZER)
FL601 FLUORESCENT INDICATOR TUBE
IC1501 FL DRIVE
IC1501 XR-1096
IC601 µPD78042GF-053-3B9 SYSTEM CONTROL /FL DRIVE
IC1104 SN74HC00AN SWITCH
IC602 REMOTE SENSOR
IC602 GP1U52XB
IC1103 MOTOR DRIVE (VOLUME)
IC1103 LB1639
IC1102 GEQ AMP
IC1102 (1/2) M5218AP
IC1101 BUFFER
IC1101 (1/2) M5218P
IC1106 GAIN SWITCH CONTROL
IC1106 MC14052
Q601 RESET
Q602 AU BUS OUT
Q1141 BN1F4M MUTE SWITCH
Q1147, 1148 HI-SPEED SWITCH
Q1144 BA1A4M LED DRIVE
Q1143 SWITCH
Q1124-1126 SWITCH
Q1101 2SC2785 DBFB
Q1151 2SC2785 DBFB
Q1102 2SC3622A MUTE
Q1152 2SC3622A MUTE
GAIN CONTROL
X601 4.19MHz
D1130-1134 SEL5220S-TH8C
(VIDEO) (TAPE) (CD) (TUNER) (PHONO)
D1160-1164 SEL5220S-TH8C
(FLAT) (DANCE) (POPS) (ROCK) (CLASSIC)
D1145 SEL5220S-TH8C (VOLUME)
RV1101 100k/100k SURROUND
RV1102 100k/100k DBFB
RV1109 100K/100K VOLUME
VOL.A
VOL.B
VOL MOTOR
US, CANADIAN, IT MODEL
G MODEL
E, IT, AUS, MX, PX MODEL
(DUAL MODE TUNING)
(PRESET STATION)
S601 BAND
S602 SHIFT
S603 −
S604 +
S605 1
S606 2
S607 3
S608 4
S609 5
S610 6
S611 7
S612 8
S613 9
S614 0
S616 MEMORY
S617 STEREO/MONO
S619 VIDEO
S620 TAPE
S621 CD
S622 TUNER
S623 PHONO
S625 FLAT
S626 DANCE
S627 POPS
S628 ROCK
S629 CLASSIC
CN601
DIGITAL GND
DIGITAL GND
RESET
+6V
MUTING
STEREO
TUNED
DO (SI)
CL
DI (SO)
CE
TO MAIN BOARD (1/2) ① CN1
(See page 37.)
CN1101
DATA.1
DATA.0
CD.BUSY
DATA.3
CD.CLOCK
DATA.2
FUNCTION.C
FUNCTION.B
GND
FUNCTION.A
AU.BUS
+6V
RELAY
FILAMENT
−7V
MULTI.CONT
FILAMENT
−30V
+7V
HI-SPEED
TO MAIN BOARD (2/2) ② CN1206
(See page 31.)
NO.812
L-PANEL.IN
GND
R-PANEL.IN
TO MAIN BOARD (2/2) ⑦ CN1231
(See page 32.)
NO.201
L-CH
GND
R-CH
③ TO POWER AMPLIFIER BOARD CN1203
(See page 33, 34.)

• Waveforms

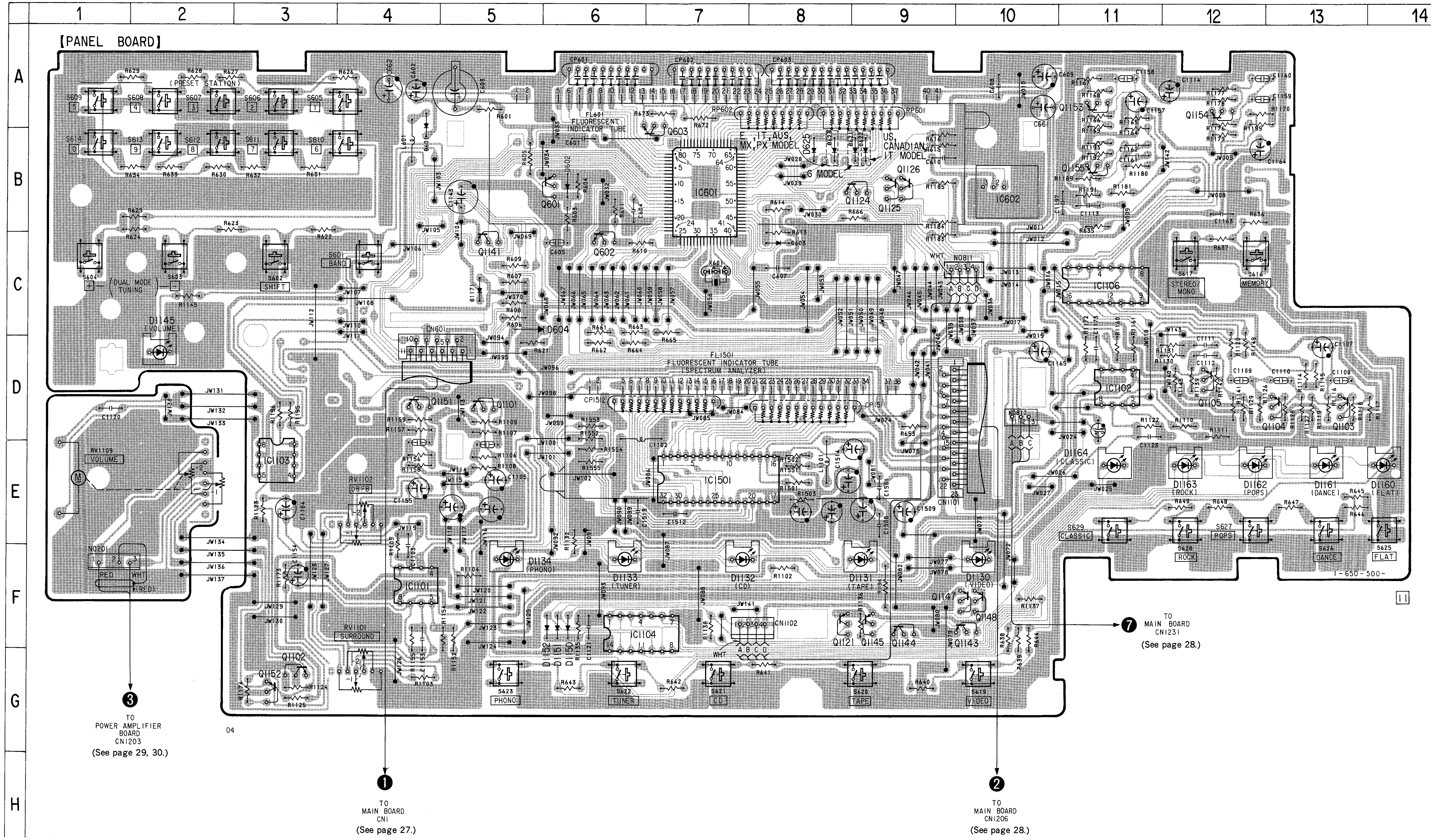
① 4.5Vp-p 4.2MHz IC601 ㉞

② 5.5Vp-p 4.2MHz IC601 ㉟

Note :

- All capacitors are in µF unless otherwise noted. pF : µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▬▬ : B+ Line
- ▬ ▬ : B− Line
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
- Abbreviations
  G : German model
  IT : Italian model
  MX : Mexican model
  AUS : Australian model

5-14. PRINTED WIRING BOARD—PANEL SECTION— • **Refer to page 45 for Semiconductor Lead Layouts.**



• Semiconductor Location

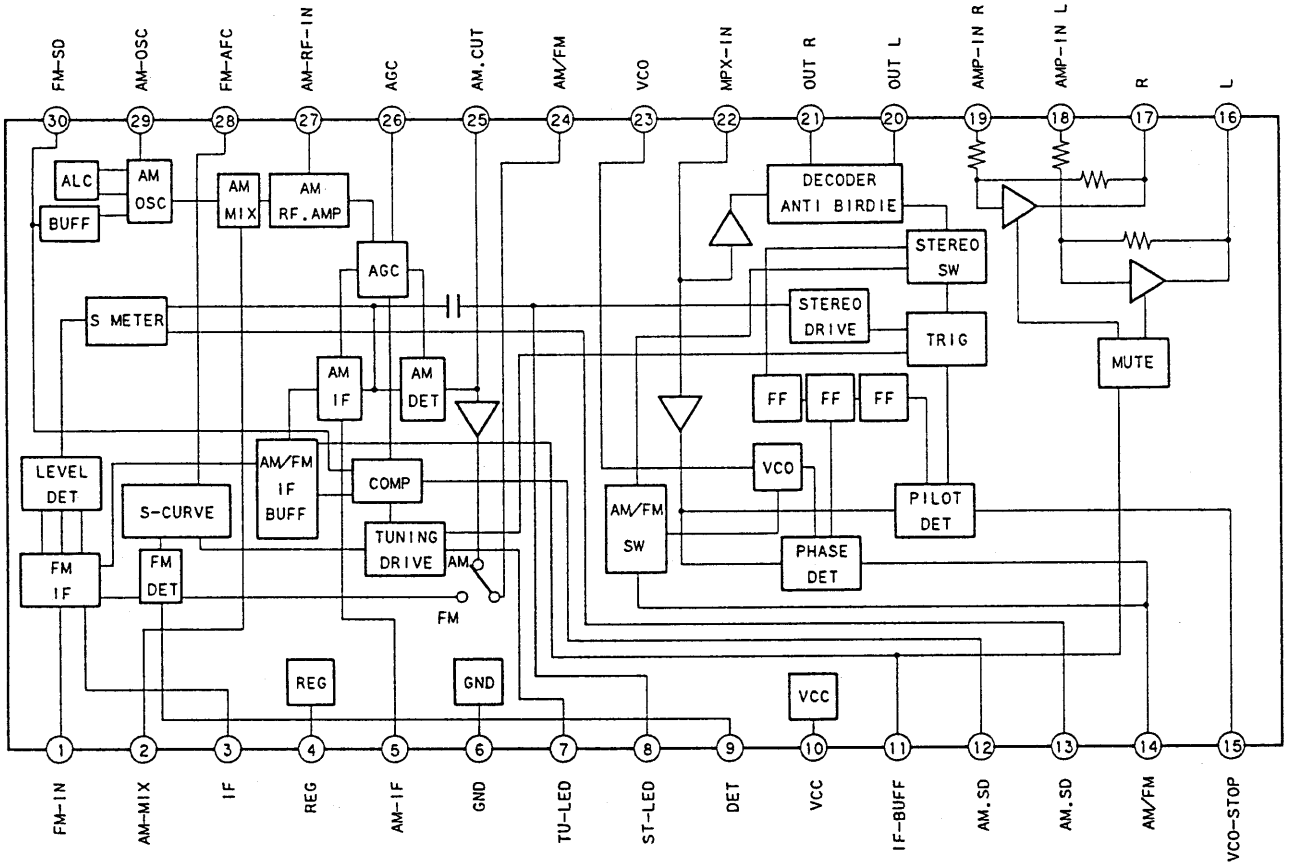
Ref. No.	Location
D601	B-4
D602	B-6
D603	C-8
D604	C-5
D621	B-8
D622	B-9
D623	B-8
D625	B-8
D1130	F-10
D1131	F-9
D1132	F-7
D1133	F-6
D1134	F-5
D1145	D-2
D1150	F-6
D1151	F-6
D1152	F-6
D1160	E-14
D1161	E-13
D1162	E-12
D1163	E-12
D1164	E-11
D1171	C-5
IC601	B-7
IC602	B-10
IC1101	F-4
IC1102	D-11
IC1103	E-3
IC1104	F-6
IC1106	C-11
IC1501	E-7
Q601	B-6
Q602	C-6
Q603	B-7
Q1101	D-5
Q1102	G-3
Q1103	D-13
Q1104	D-13
Q1105	D-12
Q1121	F-8
Q1124	B-8
Q1125	B-9
Q1126	B-9
Q1141	C-5
Q1143	F-10
Q1144	F-9
Q1145	F-9
Q1147	F-10
Q1148	F-10
Q1151	D-4
Q1152	G-3
Q1153	A-11
Q1154	A-12
Q1155	B-11

Note :

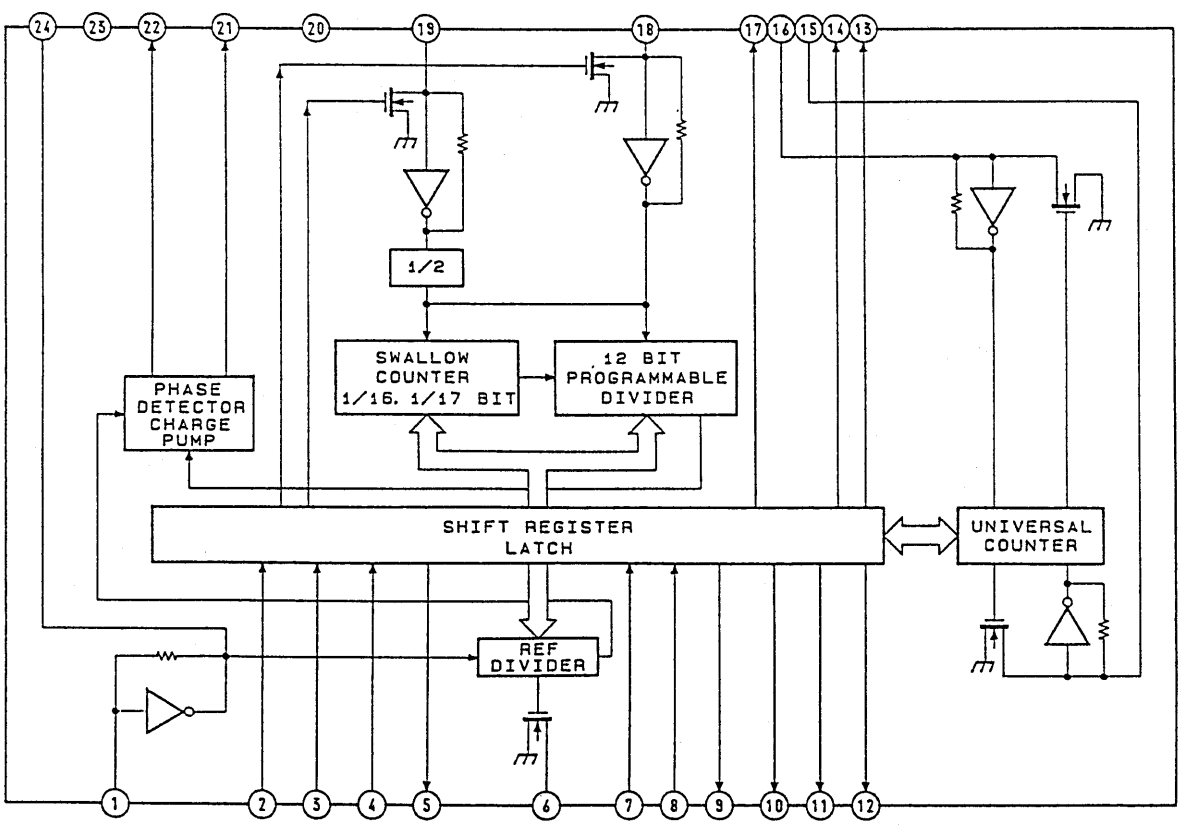
- ○— : parts extracted from the component side.
- ▒▒ : Pattern on the side which is seen.
- Abbreviations
  - G : German model
  - IT : Italian model
  - MX : Mexican model
  - AUS : Australian model

• **IC Block Diagrams**

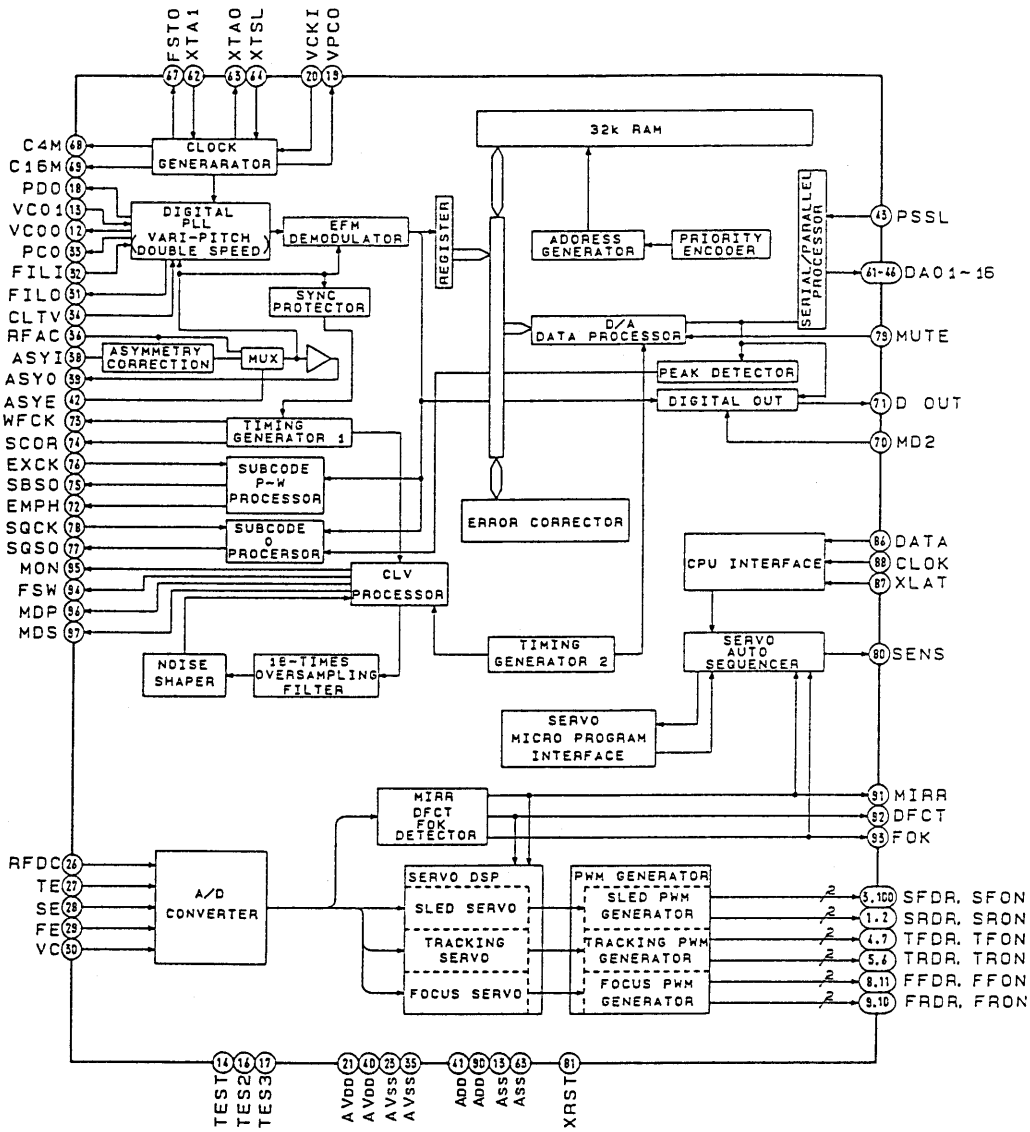
IC1 LA1835



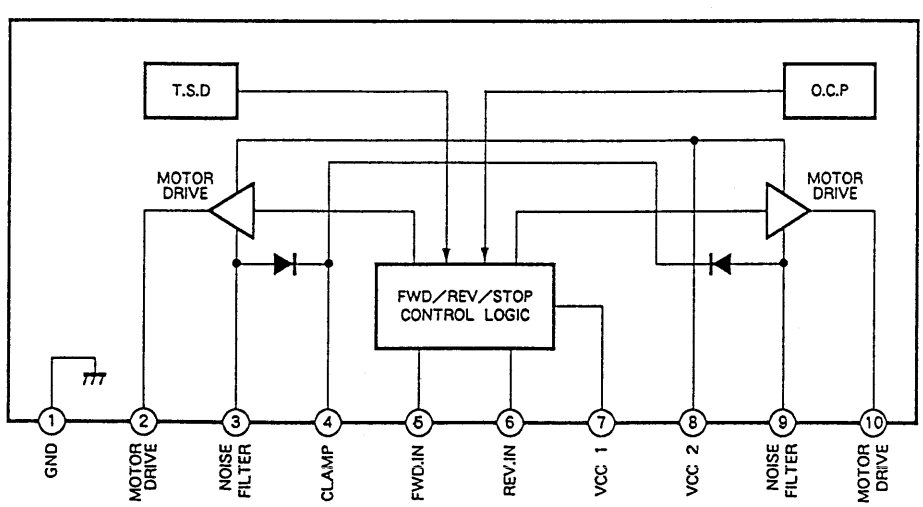
IC51 LC7218



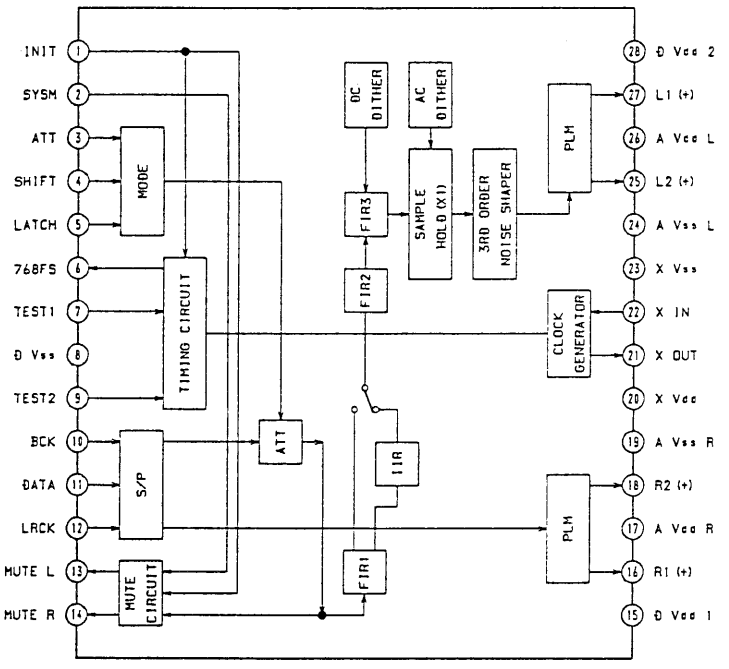
IC101 CXD2515Q



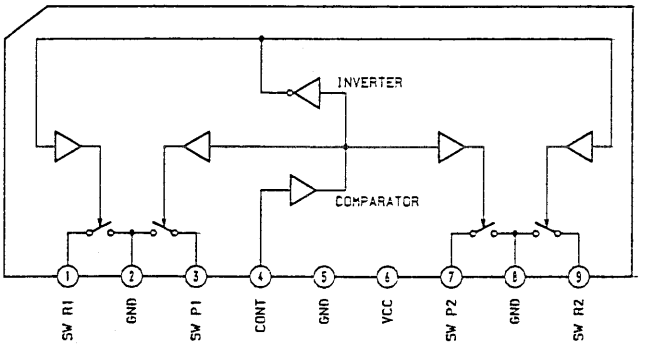
IC304 L78LR05
IC1305 L78MR06



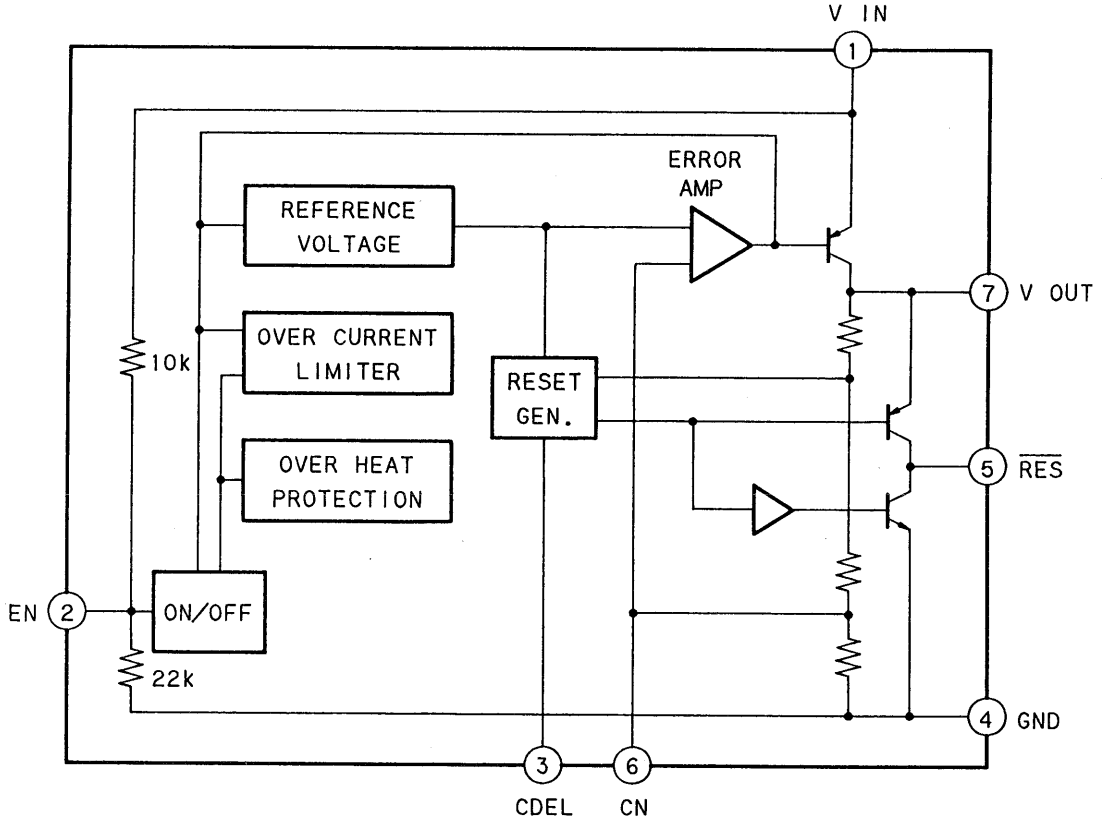
IC103 CXD2565M



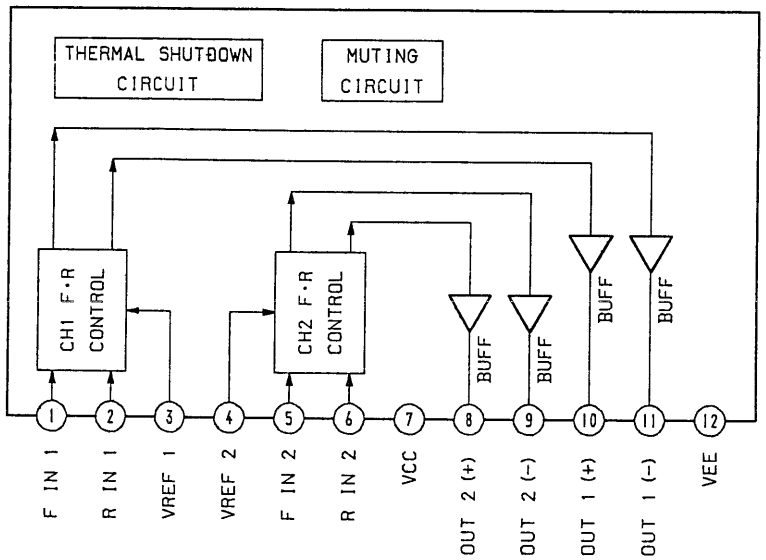
IC906 μPC1330HA



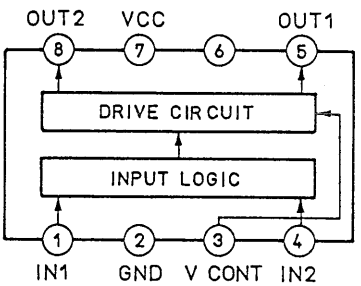
IC302 LA5602



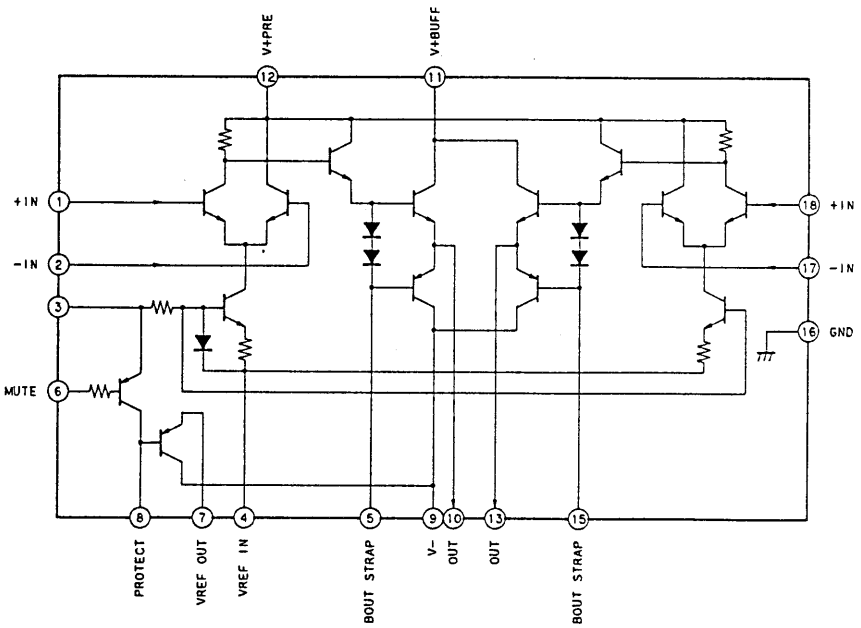
IC341 BA6191



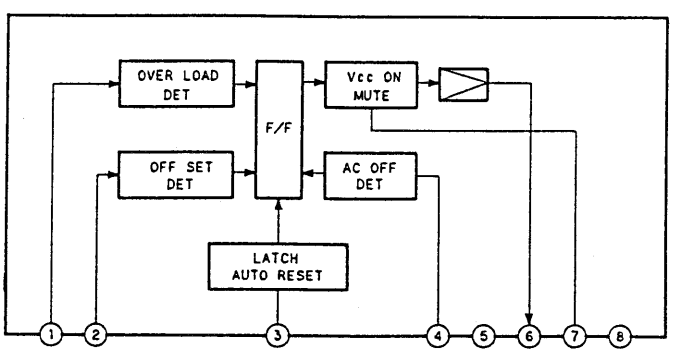
IC1103 LB1639



IC1201 STK4142-MK2 (CND, AEP, UK, G, IT)
STK4152-MK2K (E, AUS, MX, PX)
STK4231-MK2 (US)



IC1202 μPC1237HA



5-15. PIN DESCRIPTION

• IC601 μPD78042GF-053-3B9

Pin No.	Pin Name	I/O	Pin Description
1	7G	O	FL tube digit output
2	6G	O	FL tube digit output
3	5G	O	FL tube digit output
4	4G	O	FL tube digit output
5	3G	O	FL tube digit output
6	2G	O	FL tube digit output
7	1G	O	FL tube digit output
8	VDD	—	Microcomputer power (5V)
9	CL	O	Serial clock output to LC7218 (PLL IC).
10	SO/IF COUNT NG	O	Serial data output to LC7218 (PLL IC).
11	SI	I	Serial data input from LC7218 (PLL IC).
12	CE/TIMER CLOCK	I	Chip enable input from LC7218 (PLL IC).
13	TUNED IN	I	Modulation signal from tuner block. (L···Field)
14	STEREO IN	I	Stereo signal from tuner block. (L···FM STEREO received)
15	MUTING	O	Audio mute (L : Mute)
16	AUX. OUT	—	Not used.
17	RESET	—	Microcomputer reset pin
18	FUNCTION A	O	Function control
19	FUNCTION B	O	Function control
20	AVSS	—	A/D GND for key input.
21	DISPLAY. DATA. 3	I	CD display data bit 3
22	DISPLAY. DATA. 2	I	CD display data bit 2
23	DISPLAY. DATA. 1	I	CD display data bit 1
24	DISPLAY. DATA. 0	I	CD display data bit 0
25	AUB. OUT	O	AU BUS output
26	RELAY	O	Relay control (H : System ON)
27	KEY IN1	I	Key input (A/D change line 1)
28	KEY IN0	I	Key input (A/D change line 0)
29	AVDD	—	A/D power for key input (5V)
30	AVREF	—	A/D reference voltage (5V)
31	CD. BUSY	I	At H, CD is Active. (At H, tuner is fundamentally not operated.)
32	—	—	Not used.
33	GND	—	Microcomputer GND
34	X1	—	Crystal connection pin for Main•clock oscillator.
35	X2	—	Crystal connection pin for Main•clock oscillator.
36	VIDEO. LED	O	Video function LED
37	TAPE. LED	O	Tape function LED
38	CD. LED	O	CD function LED
39	TUNER. LED	O	Tuner function LED
40	PHONO. LED	O	Phono function LED
41	EQ. C	O	Preset•equalizer control
42	EQ. B	O	Preset•equalizer control
43	EQ. A	O	Preset•equalizer control
44	HOLD	I	Power cut detection pin (Normally : H, AC no connect : L)

Pin No.	Pin Name	I/O	Pin Description
45	CD. CLOCK	I	CD display data clock
46	SIRCS IN	I	SIRCS input
47	AUB. IN	I	AU BUS input
48	—	—	Connect to GND.
49	FUNCTION. C	—	Not used.
50	VOL. B	O	Volume control (VOL DOWN)
51	VOL. A	O	Volume control (VOL UP)
52	VDD	—	Microcomputer power (5V)
53	—	—	Not used.
54	DIODE. IN2	I	Distination•model discrimination input * 1
55	DIODE. IN1	I	Distination•model discrimination input * 1
56	S0	O	FL tube segment output
57	S1	O	FL tube segment output
58	S2	O	FL tube segment output
59	S3	O	Distination•model discrimination output * 1
60	S4	O	Distination•model discrimination output * 1
61	S5	O	Distination•model discrimination output * 1
62	S6	O	FL tube segment output
63	S7	O	FL tube segment output
64	S8	O	FL tube segment output
65	S9	O	FL tube segment output
66	S10	O	FL tube segment output
67	S11	O	FL tube segment output
68	S12	O	FL tube segment output
69	S13	O	FL tube segment output
70	S14	O	FL tube segment output
71	V. LOAD	—	Minus voltage for FL tube.
72	S15	O	FL tube segment output
73	S16	O	FL tube segment output
74	S17	O	FL tube segment output
75	S18	O	FL tube segment output
76	S19	O	FL tube segment output
77	S20	O	FL tube segment output
78	VOL. LED	O	Volume LED output
79	9G	—	Not used.
80	8G	O	FL tube digit output

* 1

[DIODE MATRIX] (Pin No. is IC601's pin No.)

Output / Input	Pin⑥①	Pin⑥⓪	Pin⑤⑨
Pin⑤⑤	A	C	○
Pin⑤④	B	×	×

× : Not use for diode.
○ : Use for diode.

〔DISTINATION SELECT〕

	G	US, CND	IT	E, AUS, MX, PX
A	○	×	×	×
B	×	○	○	×
C	×	×	○	○

● Abbreviations
G : German model
CND : Canadian model
IT : Italian model
AUS : Australian model
MX : Mexican model

SECTION 6
EXPLODED VIEWS

NOTE:

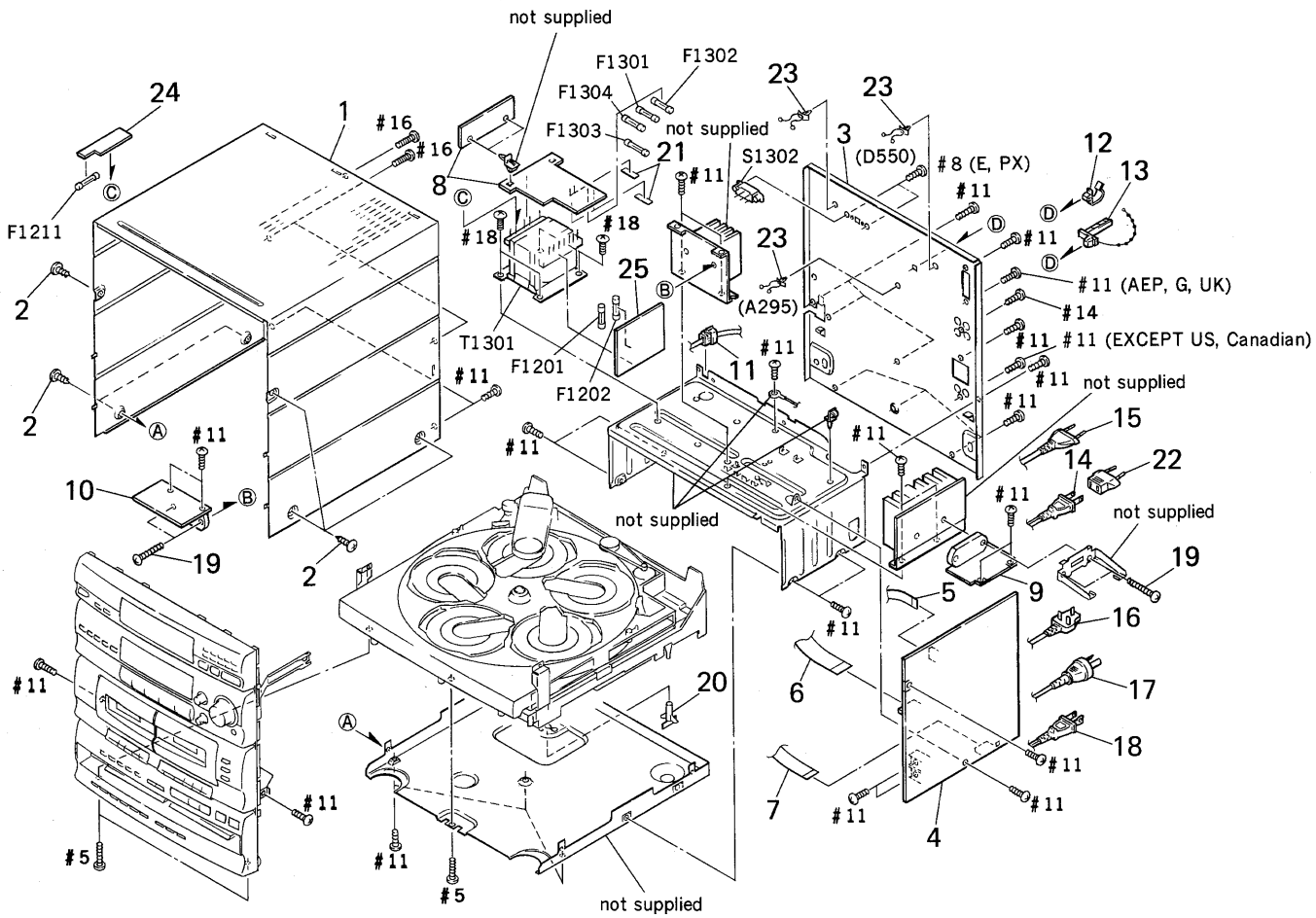
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Abbreviations
  AEP1 : AEP unit with no PHONO POWER SOURCE
  AEP2 : AEP unit with PHONO POWER SOURCE
  IT : Italian model
  G : German model
  MX : Mexican model
  AUS : Australian model

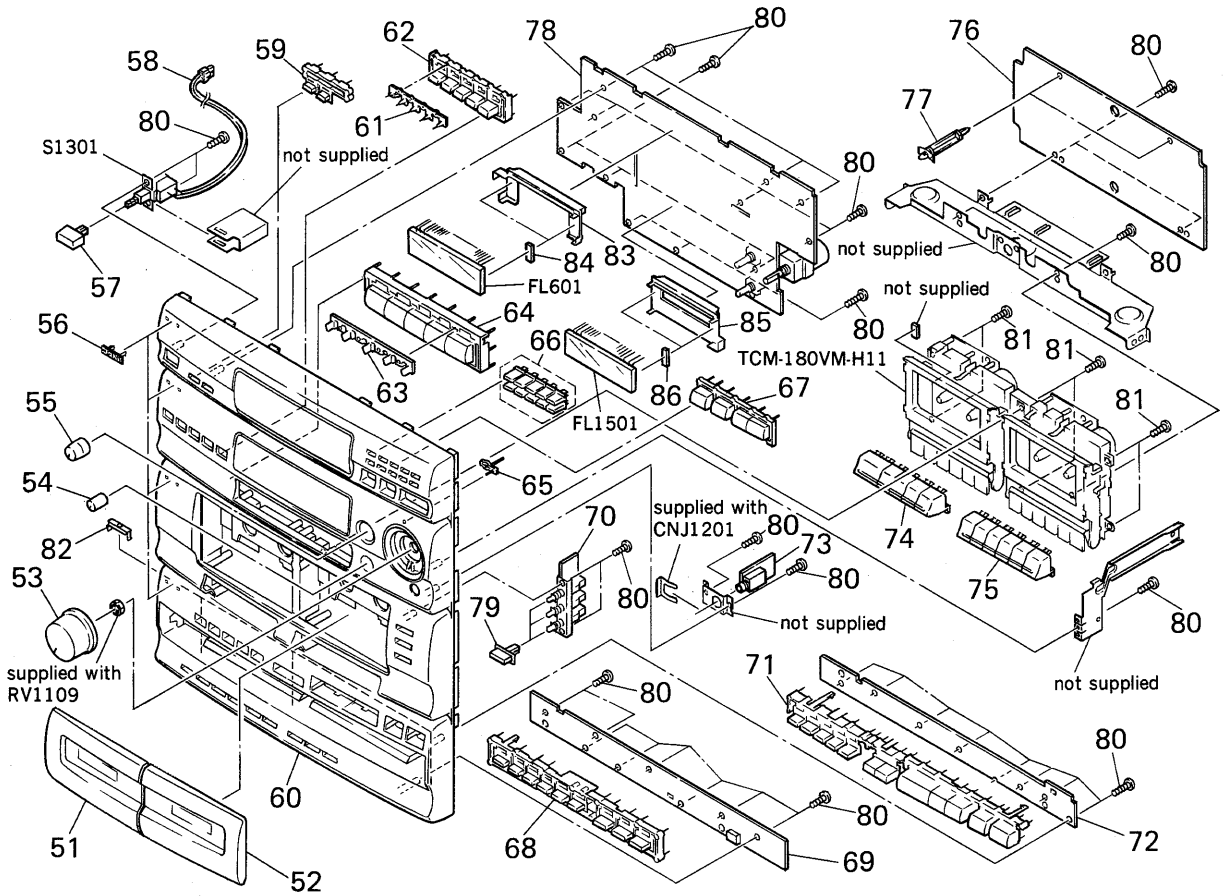
6-1. CHASSIS SECTION


not supplied
F1301
F1302
F1304
F1303
not supplied
S1302
(D550)
#8 (E, PX)
#11 (AEP, G, UK)
#14
#11 (EXCEPT US, Canadian)
not supplied
(A295)
T1301
F1201
F1202
F1211
#16
#18
#11
not supplied
not supplied
not supplied

Ref. No.	Part No.	Description	Remark
* 1	4-962-724-11	CASE (CDM)	
2	3-363-099-01	SCREW (CASE 3 TP2)	
* 3	4-962-738-01	PANEL, BACK (UK)	
* 3	4-962-738-11	PANEL, BACK (Canadian)	
* 3	4-962-738-31	PANEL, BACK (AEP2)	
* 3	4-962-738-41	PANEL, BACK (IT)	
* 3	4-962-738-51	PANEL, BACK (US)	
* 3	4-962-738-71	PANEL, BACK (AEP1)	
* 3	4-962-738-81	PANEL, BACK (G)	
* 3	4-962-739-01	PANEL, BACK (E)	
* 3	4-962-739-11	PANEL, BACK (MX)	
* 3	4-962-739-21	PANEL, BACK (AUS)	
* 3	4-962-739-31	PANEL, BACK (PX)	
* 4	A-4365-904-A	MAIN BOARD, COMPLETE (AEP2)	
* 4	A-4365-925-A	MAIN BOARD, COMPLETE (E, AUS, MX, PX)	
* 4	A-4365-937-A	MAIN BOARD, COMPLETE (US)	
* 4	A-4369-078-A	MAIN BOARD, COMPLETE (UK)	
* 4	A-4369-094-A	MAIN BOARD, COMPLETE (AEP1)	
* 4	A-4369-098-A	MAIN BOARD, COMPLETE (IT)	
* 4	A-4369-258-A	MAIN BOARD, COMPLETE (Canadian)	
* 4	A-4369-605-A	MAIN BOARD, COMPLETE (G)	
5	1-590-576-11	WIRE, FLAT TYPE (11 CORE)	
6	1-751-747-11	WIRE (FLAT TYPE) (23 CORE)	
7	1-765-234-11	CORD, CONNECTION (17 CORE)	
* 8	1-650-434-11	POWER BOARD (A295)	
* 9	A-4365-931-A	POWER AMPLIFIER BOARD, COMPLETE (US)	
* 10	A-4365-902-A	POWER AMPLIFIER BOARD, COMPLETE (Canadian, AEP, UK)	
* 10	A-4365-923-A	POWER AMPLIFIER BOARD, COMLETE (E, AUS, MX, PX)	
* 10	A-4369-101-A	POWER AMPLIFIER BOARD, COMPLETE (G, IT)	
* 11	3-703-244-00	BUSHING (2104), CORD (US, Canadian, AEP, UK, G, IT)	
11	3-703-571-11	BUSHING (S) (4516), CORD (E, AUS, MX, PX)	

Ref. No.	Part No.	Description	Remark
* 12	4-949-235-01	HOOK (EXCEPT UK)	
13	4-956-370-12	BAND, PLUG FIXED (AUS, UK)	
⚠14	1-575-653-11	CORD, POWER (E, MX, PX)	
⚠15	1-575-651-11	CORD, POWER (AEP, G, IT)	
⚠16	1-696-570-21	CORD, POWER (UK)	
⚠17	1-696-848-21	CORD, POWER (AUS)	
⚠18	1-690-609-11	CORD, POWER (US, Canadian)	
19	4-928-635-11	SCREW, +BV (2.6X16) TAPPING	
20	4-937-945-01	PLATE (TRANSPORT), LOCK	
* 21	3-701-946-26	LABEL (4A125V), FUSE (Canadian)	
⚠22	1-569-007-11	ADAPTOR, CONVERSION 2P (PX)	
23	4-953-346-01	CLAMP, LEAD	
* 24	1-650-485-11	POWER PRIMARY BOARD (D550)	
* 25	1-651-320-11	POWER SECONDARY BOARD (D550)	
⚠F1201	1-576-108-11	FUSE (4A/125V) (US)	
⚠F1202	1-576-108-11	FUSE (4A/125V) (US)	
⚠F1211	1-576-108-11	FUSE (4A/125V) (US)	
⚠F1301	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1301	1-576-108-11	FUSE (4A/125V) (Canadian)	
⚠F1302	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1302	1-576-108-11	FUSE (4A/125V) (Canadian)	
⚠F1303	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1303	1-576-108-11	FUSE (4A/125V) (Canadian)	
⚠F1304	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1304	1-576-108-11	FUSE (4A/125V) (Canadian)	
⚠S1302	1-570-046-21	SWITCH, VOLTAGE CHANGE (VOLTAGE SELECTOR) (E, PX)	
⚠T1301	1-423-914-11	TRANSFORMER, POWER (AEP, UK, G, IT)	
⚠T1301	1-423-915-11	TRANSFORMER, POWER (E, AUS, MX, PX)	
⚠T1301	1-423-916-11	TRANSFORMER, POWER (US)	
⚠T1301	1-423-917-11	TRANSFORMER, POWER (Canadian)	

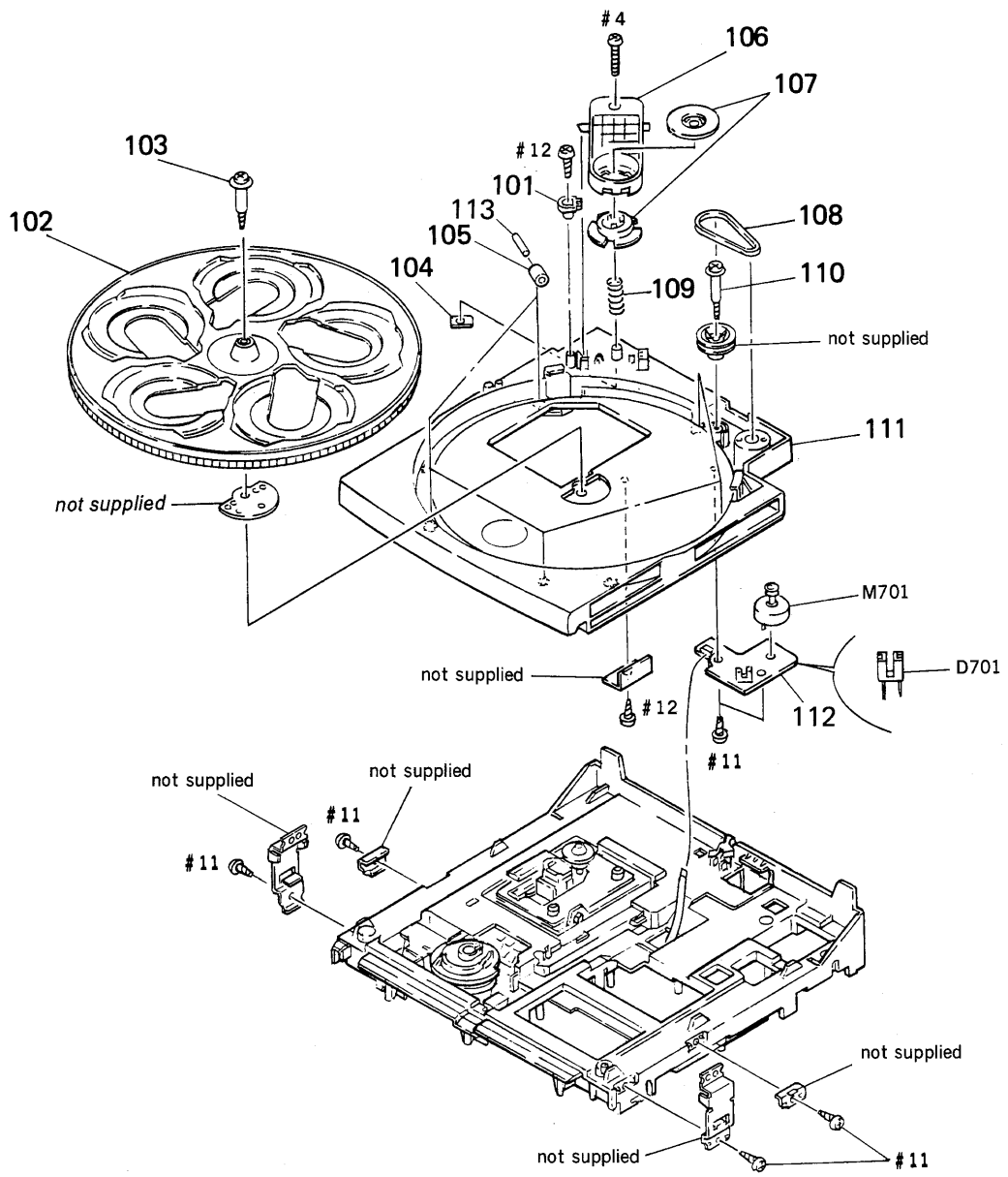
6-2. FRONT PANEL SECTION



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

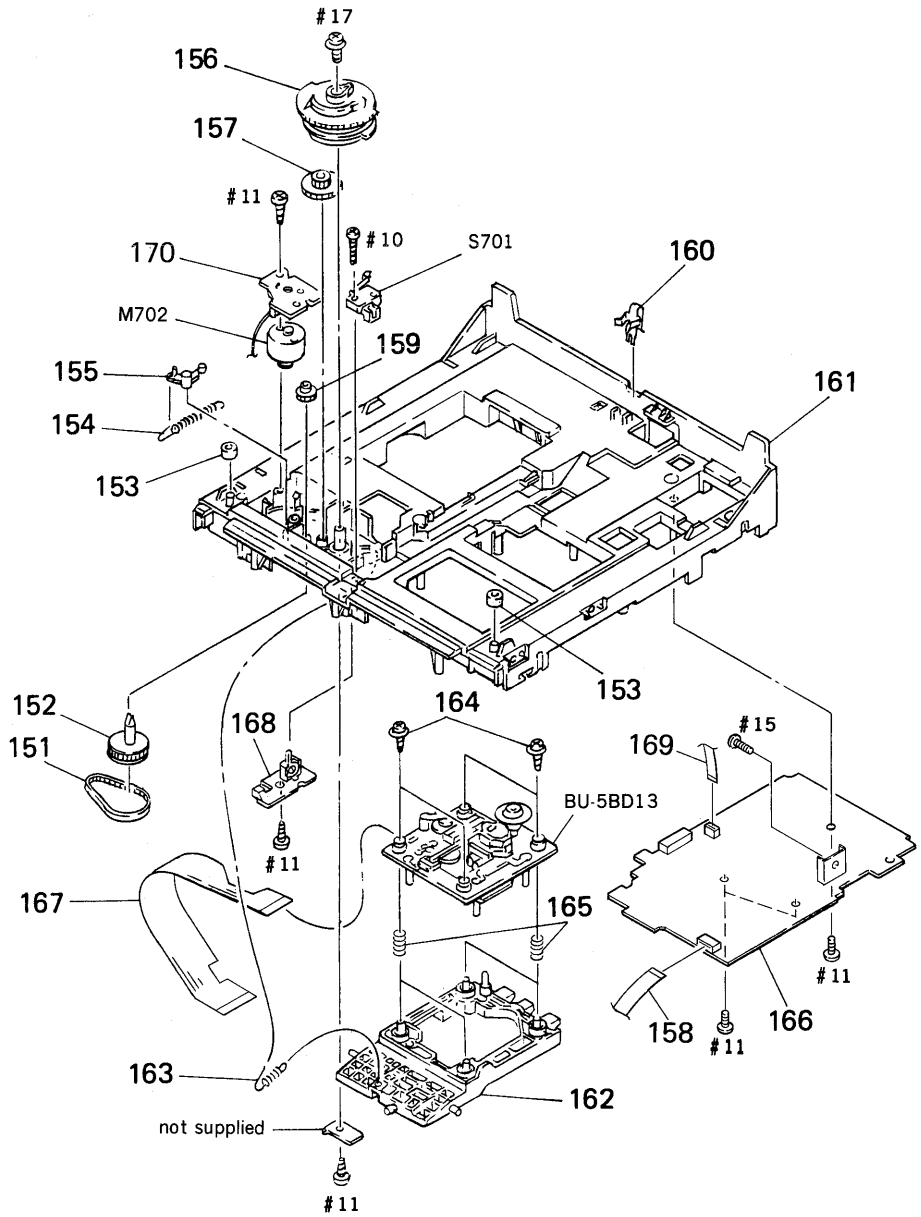
Ref. No.	Part No.	Description	Remark
51	X-4944-276-1	LID (A) ASSY, CASSETTE	
52	X-4944-277-1	LID (B) ASSY, CASSETTE	
53	4-955-635-02	KNOB (V)	
54	4-955-744-01	KNOB (BA)	
55	4-962-703-01	KNOB (SUR)	
56	4-962-708-11	EMBLEM (4-A), SONY	
57	4-930-783-11	BUTTON (PO)	
* 58	1-690-708-11	CORD (WITH CONNECTOR) (D550)	
58	1-765-058-11	CORD (WITH CONNECTOR) (A295)	
59	4-962-660-01	BUTTON (MEMORY)	
60	X-4944-680-1	PANEL ASSY, FRONT (A295)	
60	X-4944-683-1	PANEL ASSY, FRONT (D550)	
61	4-962-677-01	INDICATOR (SELECT 5)	
62	4-962-678-01	BUTTON (SELECT 5)	
63	4-962-680-01	INDICATOR (FU)	
64	4-962-681-01	BUTTON (FU)	
65	4-962-682-01	INDICATOR (VO)	
66	4-962-676-01	BUTTON (PRESET)	
67	4-962-661-01	BUTTON (BAND)	
68	4-962-666-01	BUTTON (PROGRAM)	
* 69	1-650-502-11	CD LOWER BOARD	
* 70	1-650-504-11	SW BOARD	
71	X-4944-347-1	BUTTON (CDM) ASSY	
* 72	1-650-501-11	CD UPPER BOARD	
* 73	1-650-503-11	H.P. BOARD	
74	4-962-663-01	BUTTON (MD-A)	
75	4-962-664-01	BUTTON (MD-B)	
* 76	A-4365-772-A	MAIN TC BOARD, COMPLETE (E, AUS, MX, PX)	
* 76	A-4365-787-A	MAIN TC BOARD, COMPLETE (US, Canadian, AEP, UK)	
* 76	A-4371-005-A	MAIN TC BOARD, COMPLETE (G, IT)	
* 77	4-924-098-81	HOLDER, PC BOARD	
* 78	A-4365-891-A	PANEL BOARD, COMPLETE (AEP, UK)	
* 78	A-4365-913-A	PANEL BOARD, COMPLETE (E, AUS, MX, PX)	
* 78	A-4365-929-A	PANEL BOARD, COMPLETE (D550)	
* 78	A-4369-096-A	PANEL BOARD, COMPLETE (IT)	
* 78	A-4369-256-A	PANEL BOARD, COMPLETE (Canadian)	
* 78	A-4369-603-A	PANEL BOARD, COMPLETE (G)	
79	4-964-288-01	BUTTON (DDT-3)	
80	4-951-620-01	SCREW (2.6X8), +BVTP	
81	4-951-620-11	SCREW (2.6X10), +BVTP	
82	4-962-705-01	CHASSIS, HOLDER	
* 83	4-955-792-01	HOLDER (5M), FL TUBE	
* 84	4-949-935-01	CUSHION (FL)	
* 85	4-962-699-01	HOLDER, FL TUBE	
* 86	4-949-935-21	CUSHION (FL)	
FL601	1-517-259-11	INDICATOR TUBE, FLUORESCENT	
FL1501	1-517-260-11	INDICATOR TUBE, FLUORESCENT	
⚠S1301	1-572-267-61	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	

6-3. TRAY SECTION



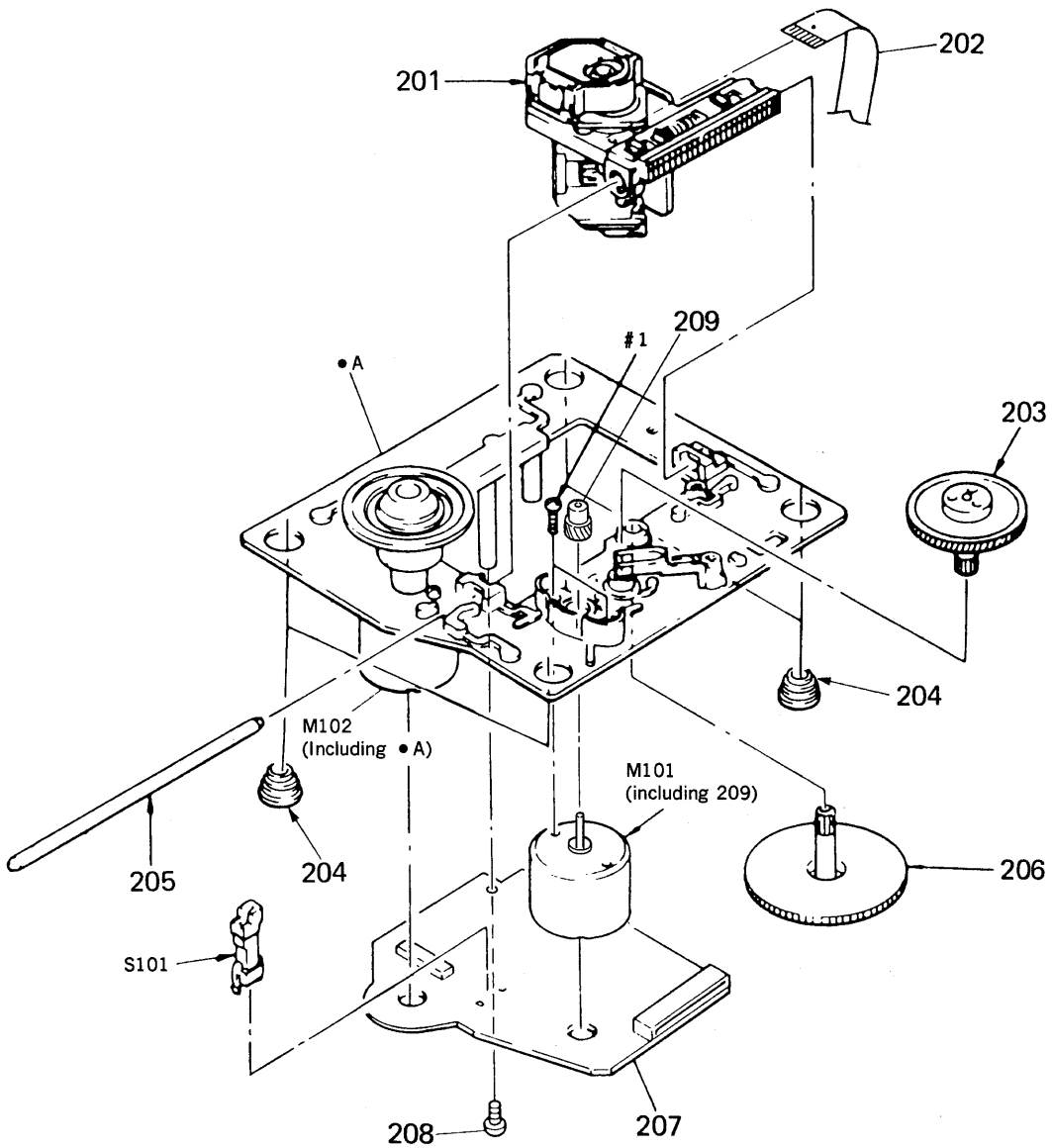
Ref. No.	Part No.	Description	Remark
* 101	4-949-226-01	PLATE, LOCK	
* 102	4-926-383-01	TABLE (B), DISC	
103	4-926-384-01	SCREW, STEP	
* 104	4-926-388-01	BRACKET (ADJUSTMENT)	
105	X-4924-457-1	ROLLER ASSY	
* 106	4-930-506-02	BRACKET (PRESS PULLEY)	
* 107	1-452-538-11	MAGNET	
108	4-926-399-01	BELT	
109	4-926-395-01	SPRING, COMPRESSION	
110	4-923-597-01	SCREW, STEP	
111	4-955-787-41	TABLE, DISC	
* 112	1-638-729-11	TABLE MOTOR BOARD	
113	4-934-376-01	SHAFT (ROLLER)	
D701	8-719-970-19	PHOTO SENSOR GP-1A521	
M701	A-4604-849-A	MOTOR ASSY, ROTARY	

6-4. CD CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
151	4-944-490-01	BELT (TIMING)	
152	X-4941-529-1	PULLEY ASSY	
* 153	4-951-619-01	CUSHION (A)	
154	4-924-412-01	SPRING (B), TENSION	
155	4-917-519-11	LEVER, SET	
156	4-934-391-01	GEAR (LOADING A)	
157	4-934-381-01	GEAR (LOADING C)	
158	1-765-195-11	WIRE (FLAT TYPE) (7 CORE)	
159	4-934-375-01	GEAR (LOADING B)	
* 160	4-943-996-06	SPRING, LEAF	
* 161	4-943-997-31	CHASSIS	
* 162	4-934-373-01	BRACKET (BU)	
163	4-937-911-01	SPRING, TENSION	
164	4-933-134-01	SCREW (+PTPWH M2.6X6)	
165	4-958-593-01	SPRING (BU), COMPRESSION	
* 166	A-4365-928-A	CD MAIN BOARD, COMPLETE	
167	1-537-645-11	JUMPER, FILM (WITH TERMINAL)	
* 168	1-638-731-11	OPEN/UP SW BOARD	
169	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
* 170	1-639-288-11	LOADING MOTOR BOARD	
M702	A-4604-847-A	MOTOR ASSY, LOADING	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	

6-5. OPTICAL PICK-UP BLOCK (BU-5BD13)

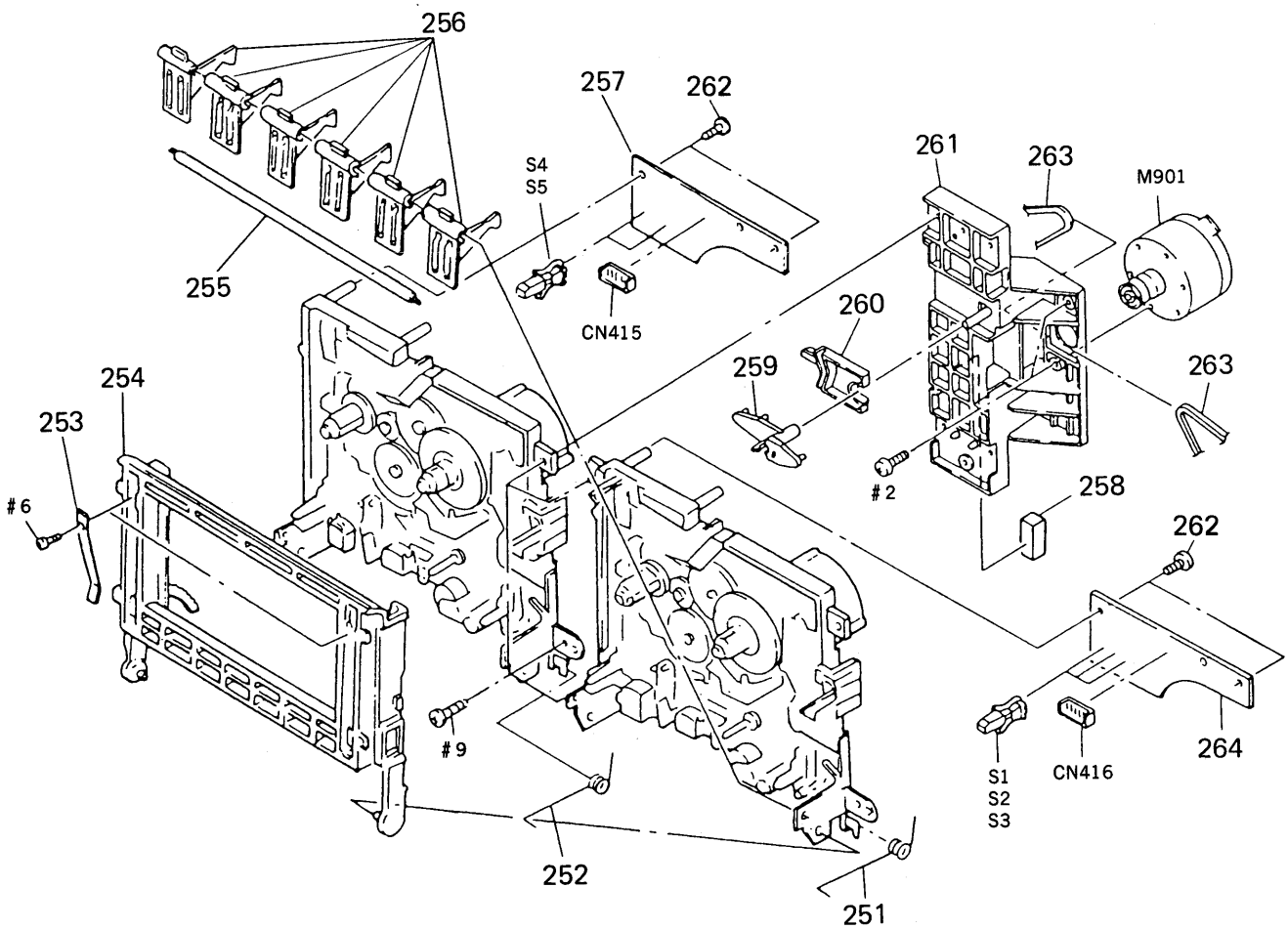


The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠201	8-848-144-11	DEVICE, OPTICAL KSS-240A	
202	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
203	4-917-567-01	GEAR (M)	
204	4-951-940-01	INSULATOR (BU)	
205	4-917-565-01	SHAFT, SLED	
206	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remark
* 207	A-4673-064-A	BD BOARD, COMPLETE	
208	4-951-620-01	SCREW (2.6X8), +BVTP	
209	4-917-566-01	GEAR (S)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
M101	X-4917-504-1	MOTOR ASSY (SLED)	
M102	X-4917-523-4	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	

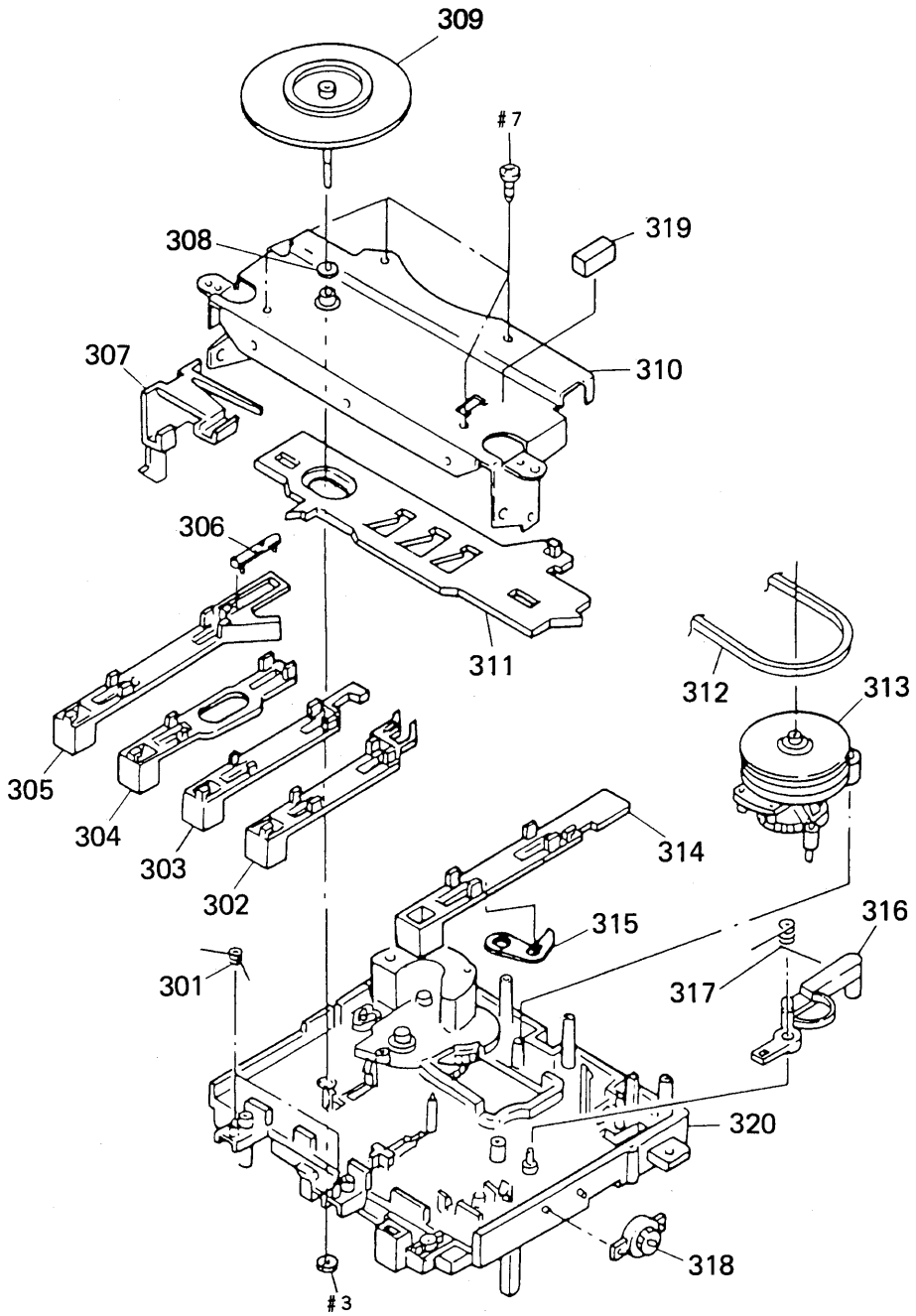
6-6. MECHANISM DECK SECTION 1 (TCM-180VW-H11)



Ref. No.	Part No.	Description	Remark
251	3-358-287-01	SPRING (LOADING A), TORSION	
252	3-358-229-01	SPRING (LOADING), TORSION	
253	3-358-209-01	SPRING (CASSETTE HOLDER), LEAF	
254	3-358-266-02	HOLDER, CASSETTE	
255	3-371-917-01	SHAFT (BUTTON SHAFT 4)	
256	3-369-335-01	LEVER (BUTTON BASE F)	
* 257	1-640-702-11	LEAF SW (A) BOARD	
* 258	3-358-289-01	SPACER (VIBRATION PROOF MAT)	
259	3-358-203-01	LEVER (TRIGGER)	
260	3-358-202-01	SLIDER (TRIGGER)	
* 261	3-363-930-01	BRACKET (JOINT BASE)	

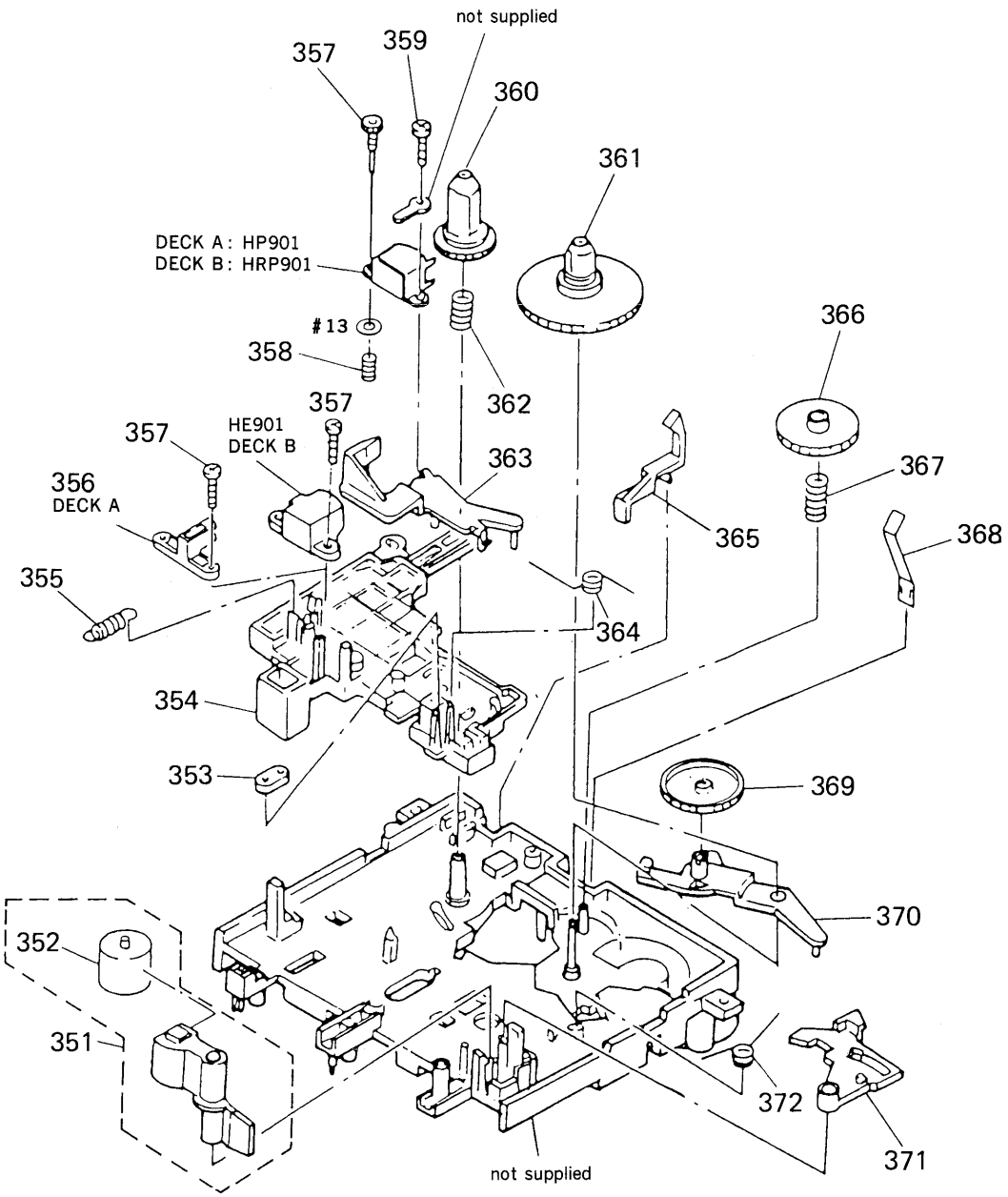
Ref. No.	Part No.	Description	Remark
262	4-951-620-01	SCREW (2.6X8), +BVTP	
263	3-364-777-01	BELT (WH)	
* 264	1-640-703-11	LEAF SW (B) BOARD	
* CN415	1-568-942-11	PIN, CONNECTOR 4P	
* CN416	1-568-943-11	PIN, CONNECTOR 5P	
M901	X-3362-377-1	MOTOR (WH) ASSY	
S1	1-571-736-11	SWITCH, LEAF (MOTOR) (DECK B)	
S2	1-571-736-11	SWITCH, LEAF (PLAY) (DECK B)	
S3	1-571-736-11	SWITCH, LEAF (REC) (DECK B)	
S4	1-571-736-11	SWITCH, LEAF (MOTOR) (DECK A)	
S5	1-571-736-11	SWITCH, LEAF (PLAY) (DECK A)	

6-7. MECHANISM DECK SECTION 2 (TCM-180VM-H11)



Ref. No.	Part No.	Description	Remark
301	3-358-232-01	SPRING (S-P F-R), TORSION	
302	3-358-258-01	SLIDER (REW)	
303	3-358-257-01	SLIDER (FF)	
304	3-358-256-01	SLIDER (STOP/EJECT)	
305	3-358-260-01	SLIDER (PAUSE)	
* 306	3-358-226-01	LEVER (PAUSE LEVER)	
* 307	3-358-261-02	SLIDER (HOLDER LOCK)	
308	3-701-437-01	WASHER	
309	X-3358-205-1	FLYWHEEL (A) ASSY (DECK B)	
309	X-3366-859-1	FLYWHEEL (D) ASSY (DECK A)	
* 310	X-3358-208-1	BRACKET (B) ASSY	
* 311	3-358-249-01	SLIDER (LOCK PLATE)	
312	3-358-230-01	BELT (A1)	
313	X-3358-202-1	LEVER (FR ARM) ASSY	
314	3-358-259-01	SLIDER (REC) (DECK B)	
* 315	3-358-204-01	LEVER (REC SAFETY)	
316	3-358-286-01	LEVER (MOTOR LEVER)	
317	3-358-214-01	SPRING (LOCK), TORSION	
317	3-358-233-01	SPRING (REC-LOCK), TORSION (DECK B)	
318	3-319-224-51	DAMPER, SMALL	
* 319	3-358-289-01	SPACER (VIBRATION PROOF MAT)	
320	X-3358-207-2	CHASSIS (A) ASSY	

6-8. MECHANISM DECK SECTION 3 (TCM-180VM-H11)



Ref. No.	Part No.	Description	Remark
351	X-3358-204-1	LEVER (PINCH LEVER) ASSY	
352	3-578-143-11	PINCH ROLLER	
* 353	3-358-215-01	BUSHING (WIRE KIT RETAINER)	
354	3-358-265-01	SLIDER (HEAD PC BOARD A)	
355	3-358-217-01	SPRING, TENSION	
* 356	3-363-931-01	GUIDE, TAPE (DECK A)	
357	3-358-288-11	SCREW (T), AZIMUTH	
358	3-358-234-01	SPRING (AZIMUTH), COMPRESSION	
359	3-358-288-01	SCREW (T), AZIMUTH	
360	3-358-248-01	GEAR (SUPPLY REEL)	
361	X-3358-203-1	TABLE (T) ASSY, REEL	
362	3-358-208-01	SPRING (SUPPLY), COMPRESSION	
* 363	3-358-251-01	LEVER (TENSION DETECTION ARM)	
364	3-358-228-01	SPRING, TORSION	
* 365	3-358-255-01	LEVER (GB LEVER) (DECK B)	
* 366	3-358-224-01	GEAR (FF GEAR)	
367	3-358-207-01	SPRING (FF GEAR), COMPRESSION	
368	3-358-227-01	SPRING, LEAF	
* 369	3-358-284-01	GEAR (TU GEAR)	
* 370	3-358-252-01	LEVER (TU ARM)	
* 371	3-358-253-01	LEVER (SHUT-OFF LEVER)	
372	3-358-243-01	SPRING (TU-SHUT), TORSION	
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)	
HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)	

BD

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- Abbreviations
  AEP1 : AEP unit with no PHONO POWER SOURCE
  AEP2 : AEP unit with PHONO POWER SOURCE
  IT : Italian model
  G : German model
  MX : Mexican model
  AUS : Australian model

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
*	A-4673-064-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C105	1-135-155-21	TANTALUM CHIP	4.7uF	10%	16V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C107	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C108	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C110	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C123	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C124	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C131	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C132	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C133	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C153	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C161	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C177	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C178	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C179	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C181	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C182	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C183	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V
C184	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V
C185	1-135-156-21	TANTALUM CHIP	6.8uF	10%	10V
C186	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C187	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C188	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C191	1-163-091-00	CERAMIC CHIP	8PF		50V
C192	1-163-091-00	CERAMIC CHIP	8PF		50V
C193	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C194	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C195	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C196	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C197	1-163-038-00	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
* CN101	1-580-875-11	SOCKET, CONNECTOR (SMT) 26P			
CN102	1-580-866-11	SOCKET, CONNECTOR (SMT) 12P			
		< IC >			
IC101	8-752-361-90	IC CXD2515Q			
IC102	8-759-176-09	IC BA6392FP			
IC103	8-752-367-61	IC CXD2565AM-T6			
		< COIL >			
L101	1-414-234-11	INDUCTOR, FERRITE BEAD			
L102	1-414-234-11	INDUCTOR, FERRITE BEAD			
L103	1-414-234-11	INDUCTOR, FERRITE BEAD			
L104	1-216-001-00	METAL CHIP	10	5%	1/10W
L105	1-216-295-00	METAL CHIP	0	5%	1/10W
L106	1-414-234-11	INDUCTOR, FERRITE BEAD			
L107	1-216-295-00	METAL CHIP	0	5%	1/10W
L108	1-216-295-00	METAL CHIP	0	5%	1/10W
		< RESISTOR >			
R101	1-216-077-00	METAL CHIP	15K	5%	1/10W
R102	1-216-097-00	METAL CHIP	100K	5%	1/10W
R103	1-216-077-00	METAL CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R106	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R107	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R108	1-216-073-00	METAL CHIP	10K	5%	1/10W
R109	1-216-121-00	METAL CHIP	1M	5%	1/10W
R110	1-216-025-00	METAL CHIP	100	5%	1/10W
R112	1-216-049-00	METAL CHIP	1K	5%	1/10W
R122	1-216-295-00	METAL CHIP	0	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-00	METAL CHIP	100K	5%	1/10W
R125	1-216-049-00	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R126	1-216-049-00	METAL CHIP	1K	5%	1/10W
R127	1-216-049-00	METAL CHIP	1K	5%	1/10W
R131	1-216-037-00	METAL CHIP	330	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W
R181	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R182	1-216-080-00	METAL CHIP	20K	5%	1/10W
R183	1-216-080-00	METAL CHIP	20K	5%	1/10W
R184	1-216-080-00	METAL CHIP	20K	5%	1/10W
R185	1-216-080-00	METAL CHIP	20K	5%	1/10W
R187	1-216-035-00	METAL CHIP	270	5%	1/10W
R188	1-216-121-00	METAL CHIP	1M	5%	1/10W
R189	1-414-234-11	INDUCTOR, FERRITE BEAD			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT)			
		< VIBRATOR >			
X101	1-579-904-11	VIBRATOR, CRYSTAL (33.8MHz)			
**********					
*	1-650-502-11	CD LOWER BOARD			
		**********			
		< CONNECTOR >			
CN201	1-691-644-11	SOCKET, CONNECTOR 7P			
		< RESISTOR >			
R201	1-249-418-11	CARBON	1.2K	5%	1/4W
R202	1-247-836-11	CARBON	1.6K	5%	1/4W
R203	1-249-421-11	CARBON	2.2K	5%	1/4W
R204	1-249-423-11	CARBON	3.3K	5%	1/4W
R205	1-249-426-11	CARBON	5.6K	5%	1/4W
R206	1-247-856-00	CARBON	11K	5%	1/4W
R207	1-249-418-11	CARBON	1.2K	5%	1/4W
R208	1-247-836-11	CARBON	1.6K	5%	1/4W
R209	1-249-421-11	CARBON	2.2K	5%	1/4W
		< SWITCH >			
S201	1-554-303-21	SWITCH, TACTILE (PROGRAM (PLAY MODE))			
S202	1-554-303-21	SWITCH, TACTILE (SHUFFLE (PLAY MODE))			
S203	1-554-303-21	SWITCH, TACTILE (CONTINUE (PLAY MODE))			
S204	1-554-303-21	SWITCH, TACTILE (EDIT)			
S205	1-554-303-21	SWITCH, TACTILE (CLEAR)			
S206	1-554-303-21	SWITCH, TACTILE (CHECK)			
S207	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)			
S208	1-554-303-21	SWITCH, TACTILE (REPEAT)			
S209	1-554-303-21	SWITCH, TACTILE (TIME)			
**********					

Ref. No.	Part No.	Description			Remark
*	A-4365-928-A	CD MAIN BOARD, COMPLETE			
		**********			
	4-875-327-31	HEAT SINK			
	7-682-547-09	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C306	1-126-059-11	ELECT	10uF	20%	50V
C307	1-126-163-11	ELECT	4.7uF	20%	50V
C308	1-124-472-11	ELECT	470uF	20%	10V
C309	1-124-473-11	ELECT	1000uF	20%	10V
C311	1-126-300-11	ELECT	0.47uF	20%	50V
C312	1-124-472-11	ELECT	470uF	20%	10V
C314	1-126-059-11	ELECT	10uF	20%	50V
C315	1-126-163-11	ELECT	4.7uF	20%	50V
C317	1-126-022-11	ELECT	47uF	20%	16V
C318	1-164-159-11	CERAMIC	0.1uF		50V
C320	1-161-494-00	CERAMIC	0.022uF		25V
C321	1-126-022-11	ELECT	47uF	20%	16V
C322	1-161-494-00	CERAMIC	0.022uF		25V
C323	1-164-159-11	CERAMIC	0.1uF		50V
C341	1-126-376-11	ELECT	470uF	20%	25V
C362	1-164-159-11	CERAMIC	0.1uF		50V
C364	1-164-159-11	CERAMIC	0.1uF		50V
C366	1-162-282-31	CERAMIC	100PF	10%	50V
C371	1-162-284-31	CERAMIC	150PF	10%	50V
C372	1-162-284-31	CERAMIC	150PF	10%	50V
C373	1-162-284-31	CERAMIC	150PF	10%	50V
C374	1-162-284-31	CERAMIC	150PF	10%	50V
C375	1-130-479-00	MYLAR	0.0047uF	5%	50V
C376	1-130-479-00	MYLAR	0.0047uF	5%	50V
C377	1-130-472-00	MYLAR	0.0012uF	5%	50V
C378	1-130-472-00	MYLAR	0.0012uF	5%	50V
C379	1-124-443-00	ELECT	100uF	20%	10V
C380	1-124-443-00	ELECT	100uF	20%	10V
C381	1-162-291-31	CERAMIC	560PF	10%	50V
C382	1-162-291-31	CERAMIC	560PF	10%	50V
		< CONNECTOR >			
CN301	1-750-585-11	CONNECTOR, FFC/FPC 7P			
* CN303	1-568-943-11	PIN, CONNECTOR 5P			
CN305	1-750-997-11	CONNECTOR, FFC/FPC 5P			
CN306	1-764-415-11	CONNECTOR, FFC/FPC 26P			
* CN309	1-568-836-11	SOCKET, CONNECTOR 17P			
		< DIODE >			
D321	8-719-987-63	DIODE	1N4148M		
D341	8-719-010-42	DIODE	UZ-5.6BSB		

CD MAIN | CD UPPER

Ref. No.	Part No.	Description			Remark
		< IC >			
IC302	8-759-061-65	IC LA5602			
IC304	8-759-805-37	IC L78LR05D-MA			
IC305	8-759-605-00	IC M5F78M07L			
IC321	8-752-854-58	IC CXP82316-038Q			
IC341	8-759-172-31	IC BA6191			
IC371	8-759-145-58	IC uPC4558C			
IC372	8-759-145-58	IC uPC4558C			
		< DIODE >			
JW304	8-719-200-82	DIODE 11ES2			
JW317	8-719-200-82	DIODE 11ES2			
JW427	8-719-987-63	DIODE 1N4148M			
JW428	8-719-987-63	DIODE 1N4148M			
		< TRANSISTOR >			
Q302	8-729-900-65	TRANSISTOR DTA144ES			
Q303	8-729-900-89	TRANSISTOR DTC144ES			
Q322	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q341	8-729-900-89	TRANSISTOR DTC144ES			
Q352	8-729-900-65	TRANSISTOR DTA144ES			
Q353	8-729-900-65	TRANSISTOR DTA144ES			
		< RESISTOR >			
R308	1-260-064-11	CARBON	1	5%	1/2W
R313	1-249-417-11	CARBON	1K	5%	1/4W
R321	1-249-429-11	CARBON	10K	5%	1/4W
R322	1-249-429-11	CARBON	10K	5%	1/4W
R323	1-249-417-11	CARBON	1K	5%	1/4W
R324	1-249-428-11	CARBON	8.2K	5%	1/4W
R325	1-249-428-11	CARBON	8.2K	5%	1/4W
R326	1-249-428-11	CARBON	8.2K	5%	1/4W
R327	1-249-428-11	CARBON	8.2K	5%	1/4W
R328	1-249-428-11	CARBON	8.2K	5%	1/4W
R329	1-249-428-11	CARBON	8.2K	5%	1/4W
R333	1-249-417-11	CARBON	1K	5%	1/4W
R334	1-249-425-11	CARBON	4.7K	5%	1/4W
R335	1-249-429-11	CARBON	10K	5%	1/4W
R336	1-249-429-11	CARBON	10K	5%	1/4W
R338	1-249-425-11	CARBON	4.7K	5%	1/4W
R339	1-249-425-11	CARBON	4.7K	5%	1/4W
R340	1-249-425-11	CARBON	4.7K	5%	1/4W
R341	1-247-876-11	CARBON	75K	5%	1/4W
R342	1-247-876-11	CARBON	75K	5%	1/4W
R343	1-247-876-11	CARBON	75K	5%	1/4W
R344	1-247-876-11	CARBON	75K	5%	1/4W
R345	1-249-423-11	CARBON	3.3K	5%	1/4W
R346	1-249-424-11	CARBON	3.9K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R347	1-249-415-11	CARBON	680	5%	1/4W
R348	1-247-834-11	CARBON	1.3K	5%	1/4W
R349	1-249-428-11	CARBON	8.2K	5%	1/4W
R350	1-247-862-11	CARBON	20K	5%	1/4W
R359	1-249-417-11	CARBON	1K	5%	1/4W
R360	1-249-417-11	CARBON	1K	5%	1/4W
R361	1-249-429-11	CARBON	10K	5%	1/4W
R363	1-249-417-11	CARBON	1K	5%	1/4W
R365	1-249-417-11	CARBON	1K	5%	1/4W
R366	1-249-417-11	CARBON	1K	5%	1/4W
R367	1-249-417-11	CARBON	1K	5%	1/4W
R368	1-249-417-11	CARBON	1K	5%	1/4W
R371	1-247-852-11	CARBON	7.5K	5%	1/4W
R372	1-247-852-11	CARBON	7.5K	5%	1/4W
R373	1-247-852-11	CARBON	7.5K	5%	1/4W
R374	1-247-852-11	CARBON	7.5K	5%	1/4W
R375	1-249-431-11	CARBON	15K	5%	1/4W
R376	1-249-431-11	CARBON	15K	5%	1/4W
R377	1-249-431-11	CARBON	15K	5%	1/4W
R378	1-249-431-11	CARBON	15K	5%	1/4W
R379	1-249-419-11	CARBON	1.5K	5%	1/4W
R380	1-249-419-11	CARBON	1.5K	5%	1/4W
R381	1-249-419-11	CARBON	1.5K	5%	1/4W
R382	1-249-419-11	CARBON	1.5K	5%	1/4W
R383	1-249-441-11	CARBON	100K	5%	1/4W
R384	1-249-441-11	CARBON	100K	5%	1/4W
R385	1-249-421-11	CARBON	2.2K	5%	1/4W
R386	1-249-421-11	CARBON	2.2K	5%	1/4W
R389	1-247-807-31	CARBON	100	5%	1/4W
R390	1-247-807-31	CARBON	100	5%	1/4W
		< VIBRATOR >			
X321	1-579-175-11	VIBRATOR, CERAMIC (10MHz)			

****

* 1-650-501-11 CD UPPER BOARD

****

< DIODE >

D201	8-719-313-72	LED	SEL3810A-CD (⏸)
D202	8-719-313-66	LED	SEL3410E-TH12 (▷)

< RESISTOR >

R210	1-249-423-11	CARBON	3.3K	5%	1/4W
R211	1-249-426-11	CARBON	5.6K	5%	1/4W
R212	1-247-856-00	CARBON	11K	5%	1/4W
R213	1-249-418-11	CARBON	1.2K	5%	1/4W
R214	1-247-836-11	CARBON	1.6K	5%	1/4W
R215	1-249-421-11	CARBON	2.2K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R216	1-249-423-11	CARBON	3.3K	5% 1/4W	
R217	1-249-426-11	CARBON	5.6K	5% 1/4W	
R218	1-247-856-00	CARBON	11K	5% 1/4W	
R219	1-249-411-11	CARBON	330	5% 1/4W	
R220	1-249-410-11	CARBON	270	5% 1/4W	
		< SWITCH >			
S210	1-554-303-21	SWITCH, TACTILE (1 (DISC SELECT))			
S211	1-554-303-21	SWITCH, TACTILE (2 (DISC SELECT))			
S212	1-554-303-21	SWITCH, TACTILE (3 (DISC SELEST))			
S213	1-554-303-21	SWITCH, TACTILE (4 (DISC SELECT))			
S214	1-554-303-21	SWITCH, TACTILE (5 (DISC SELECT))			
S215	1-554-303-21	SWITCH, TACTILE (⏮ ◀◀ (AMS))			
S216	1-554-303-21	SWITCH, TACTILE (▶▶ ⏭ (AMS))			
S217	1-554-303-21	SWITCH, TACTILE (▷)			
S218	1-554-303-21	SWITCH, TACTILE (❚❚)			
S219	1-554-303-21	SWITCH, TACTILE (■)			
S220	1-554-303-21	SWITCH, TACTILE (DISC SKIP)			
S221	1-554-303-21	SWITCH, TACTILE (⏏ OPEN/CLOSE)			
**********					
*	1-650-503-11	H. P. BOARD			
		**********			
		< CAPACITOR >			
C1237	1-162-282-31	CERAMIC	100PF	10%	50V
C1238	1-162-282-31	CERAMIC	100PF	10%	50V
		< JACK >			
CNJ1201	1-569-113-11	JACK, LARGE TYPE (HEADPHONES)			
**********					
*	1-640-702-11	LEAF SW (A) BOARD			
		**********			
		< CAPACITOR >			
C544	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
* CN415	1-568-942-11	PIN, CONNECTOR 4P			
		< SWITCH >			
S4	1-571-736-11	SWITCH, LEAF (MOTOR)			
S5	1-571-736-11	SWITCH, LEAF (PLAY)			
**********					

Ref. No.	Part No.	Description			Remark
*	1-640-703-11	LEAF SW (B) BOARD			
		**********			
		< CAPACITOR >			
C545	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
* CN416	1-568-943-11	PIN, CONNECTOR 5P			
		< SWITCH >			
S1	1-571-736-11	SWITCH, LEAF (MOTOR)			
S2	1-571-736-11	SWITCH, LEAF (PLAY)			
S3	1-571-736-11	SWITCH, LEAF (REC)			
**********					
*	1-639-288-11	LOADING MOTOR BOARD			
		**********			
		< CAPACITOR >			
C705	1-161-375-00	CERAMIC	0.0022uF	20%	50V
**********					
*	A-4365-904-A	MAIN BOARD, COMPLETE (AEP2)			
*	A-4365-925-A	MAIN BOARD, COMPLETE (E, AUS, MX, PX)			
*	A-4365-937-A	MAIN BOARD, COMPLETE (US)			
*	A-4369-078-A	MAIN BOARD, COMPLETE (UK)			
*	A-4369-094-A	MAIN BOARD, COMPLETE (AEP1)			
*	A-4369-098-A	MAIN BOARD, COMPLETE (IT)			
*	A-4369-258-A	MAIN BOARD, COMPLETE (Canadian)			
*	A-4369-605-A	MAIN BOARD, COMPLETE (G)			
		**********			
		< CAPACITOR >			
C1	1-161-379-00	CERAMIC	0.01uF	20%	25V
C2	1-124-477-11	ELECT	47uF	20%	25V
C3	1-161-379-00	CERAMIC	0.01uF	20%	25V
C4	1-161-379-00	CERAMIC	0.01uF	20%	25V
C5	1-161-379-00	CERAMIC (E, AUS, MX, PX)	0.01uF	20%	25V
C5	1-164-159-11	CERAMIC (EXCEPT E, AUS, MX, PX)	0.1uF		50V
C6	1-161-379-00	CERAMIC	0.01uF	20%	25V
C7	1-124-477-11	ELECT	47uF	20%	25V
C8	1-161-379-00	CERAMIC	0.01uF	20%	25V
C9	1-161-379-00	CERAMIC	0.01uF	20%	25V
C10	1-161-379-00	CERAMIC	0.01uF	20%	25V
C11	1-124-907-11	ELECT	10uF	20%	50V
C12	1-124-902-00	ELECT	0.47uF	20%	50V
C13	1-124-903-11	ELECT	1uF	20%	50V
C14	1-124-903-11	ELECT	1uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C15	1-124-907-11	ELECT	10uF	20%	50V
C16	1-124-907-11	ELECT	10uF	20%	50V
C17	1-124-907-11	ELECT	10uF	20%	50V
C18	1-124-907-11	ELECT	10uF	20%	50V
C19	1-136-158-00	FILM (EXCEPT US, Canadian, G, IT)	0.027uF	5%	50V
C19	1-136-159-00	FILM (G, IT)	0.033uF	5%	50V
C19	1-136-160-00	FILM (US, Canadian)	0.039uF	5%	50V
C20	1-136-158-00	FILM (EXCEPT US, Canadian, G, IT)	0.027uF	5%	50V
C20	1-136-159-00	FILM (G, IT)	0.033uF	5%	50V
C20	1-136-160-00	FILM (US, Canadian)	0.039uF	5%	50V
C21	1-161-046-00	CERAMIC	0.0039uF	10%	25V
C22	1-161-046-00	CERAMIC	0.0039uF	10%	25V
C23	1-124-903-11	ELECT	1uF	20%	50V
C24	1-162-294-31	CERAMIC	0.001uF	10%	50V
C25	1-161-327-00	CERAMIC	0.0033uF	30%	16V
C26	1-124-477-11	ELECT	47uF	20%	25V
C27	1-126-962-11	ELECT	3.3uF	20%	50V
C28	1-161-494-00	CERAMIC	0.022uF		25V
C29	1-124-907-11	ELECT	10uF	20%	50V
C30	1-161-494-00	CERAMIC	0.022uF		25V
C31	1-101-005-00	CERAMIC	22000PF		50V
C32	1-162-196-31	CERAMIC (AEP, UK)	5.6PF	10%	50V
C32	1-162-198-31	CERAMIC (EXCEPT AEP, UK)	8.2PF	10%	50V
C33	1-161-379-00	CERAMIC	0.01uF	20%	25V
C34	1-164-159-11	CERAMIC (AEP, UK)	0.1uF		50V
C37	1-161-374-11	CERAMIC (AEP, UK)	0.0015uF	20%	50V
C38	1-102-120-00	CERAMIC (AEP, UK)	0.0018uF	10%	50V
C39	1-101-005-00	CERAMIC (AEP, UK)	22000PF		50V
C45	1-161-379-00	CERAMIC	0.01uF	20%	25V
C51	1-102-961-00	CERAMIC	27PF	5%	50V
C52	1-102-961-00	CERAMIC	27PF	5%	50V
C53	1-124-477-11	ELECT	47uF	20%	25V
C54	1-161-379-00	CERAMIC	0.01uF	20%	25V
C55	1-161-379-00	CERAMIC	0.01uF	20%	25V
C56	1-161-379-00	CERAMIC	0.01uF	20%	25V
C57	1-161-379-00	CERAMIC	0.01uF	20%	25V
C58	1-161-379-00	CERAMIC	0.01uF	20%	25V
C61	1-124-925-11	ELECT	2.2uF	20%	100V
C62	1-124-463-00	ELECT	0.1uF	20%	50V
C63	1-161-379-00	CERAMIC	0.01uF	20%	25V
C64	1-161-379-00	CERAMIC	0.01uF	20%	25V
C65	1-124-477-11	ELECT	47uF	20%	25V
C67	1-161-379-00	CERAMIC	0.01uF	20%	25V
C71	1-136-173-00	FILM (AEP, UK)	0.47uF	5%	50V
C72	1-161-494-00	CERAMIC (AEP, UK)	0.022uF		25V
C73	1-124-463-00	ELECT (AEP, UK)	0.1uF	20%	50V
C1001	1-124-257-00	ELECT	2.2uF	20%	50V
C1002	1-162-282-31	CERAMIC	100PF	10%	50V
C1003	1-162-282-31	CERAMIC	100PF	10%	50V
C1004	1-124-477-11	ELECT	47uF	20%	25V
C1005	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C1006	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C1007	1-124-464-11	ELECT	0.22uF	20%	50V
C1008	1-124-477-11	ELECT (G, IT)	47uF	20%	25V
C1010	1-124-477-11	ELECT	47uF	20%	25V
C1025	1-162-286-31	CERAMIC (G, IT)	220PF	10%	50V
C1026	1-162-219-31	CERAMIC (G, IT)	68PF	5%	50V
C1041	1-162-290-31	CERAMIC (G, IT)	470PF	10%	50V
C1051	1-124-257-00	ELECT	2.2uF	20%	50V
C1052	1-162-282-31	CERAMIC	100PF	10%	50V
C1053	1-162-282-31	CERAMIC	100PF	10%	50V
C1054	1-124-477-11	ELECT	47uF	20%	25V
C1055	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C1056	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C1057	1-124-464-11	ELECT	0.22uF	20%	50V
C1058	1-124-477-11	ELECT (G, IT)	47uF	20%	25V
C1060	1-124-477-11	ELECT	47uF	20%	25V
C1075	1-162-286-31	CERAMIC (G, IT)	220PF	10%	50V
C1076	1-162-219-31	CERAMIC (G, IT)	68PF	5%	50V
C1091	1-162-290-31	CERAMIC (G, IT)	470PF	10%	50V
C1221	1-126-101-11	ELECT	100uF	20%	16V
C1222	1-126-176-11	ELECT	220uF	20%	10V
C1223	1-126-176-11	ELECT	220uF	20%	10V
C1245	1-101-006-00	CERAMIC (G, IT)	0.047uF		50V
C1245	1-164-097-11	CERAMIC (AEP, UK)	0.022uF		50V
C1246	1-101-006-00	CERAMIC (G, IT)	0.047uF		50V

Ref. No.	Part No.	Description			Remark
C1246	1-164-097-11	CERAMIC (AEP, UK)	0. 022uF		50V
C1247	1-101-006-00	CERAMIC (G, IT)	0. 047uF		50V
C1247	1-164-097-11	CERAMIC (AEP, UK)	0. 022uF		50V
C1248	1-101-006-00	CERAMIC (G, IT)	0. 047uF		50V
C1248	1-164-097-11	CERAMIC (AEP, UK)	0. 022uF		50V
C1249	1-161-494-00	CERAMIC (G, IT)	0. 022uF		25V
C1250	1-161-494-00	CERAMIC (G, IT)	0. 022uF		25V
C1302	1-102-394-11	CERAMIC	0. 01uF		250V
C1304	1-126-974-11	ELECT (A295)	3300uF	20%	50V
C1304	1-128-493-11	ELECT (D550)	4700uF	20%	71V
C1305	1-126-974-11	ELECT (A295)	3300uF	20%	50V
C1305	1-128-493-11	ELECT (D550)	4700uF	20%	71V
C1306	1-124-477-11	ELECT	47uF	20%	25V
C1308	1-126-101-11	ELECT	100uF	20%	16V
C1309	1-126-101-11	ELECT	100uF	20%	16V
C1312	1-124-563-11	ELECT	2200uF	20%	25V
C1313	1-126-946-11	ELECT	6800uF	20%	25V
C1314	1-124-122-11	ELECT	100uF	20%	50V
C1315	1-124-907-11	ELECT	10uF	20%	50V
C1316	1-124-910-11	ELECT	47uF	20%	50V
C1319	1-124-463-00	ELECT	0. 1uF	20%	50V
C1320	1-124-907-11	ELECT	10uF	20%	50V
C1321	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C1322	1-161-379-00	CERAMIC	0. 01uF	20%	25V
C1324	1-124-907-11	ELECT	10uF	20%	50V
C1326	1-124-907-11	ELECT	10uF	20%	50V
C1330	1-126-101-11	ELECT	100uF	20%	16V
C1331	1-102-394-11	CERAMIC	0. 01uF		250V
C1335	1-124-907-11	ELECT (AEP2, UK, G)	10uF	20%	50V
C1336	1-126-101-11	ELECT (AEP2, UK, G)	100uF	20%	16V
C1340	1-124-556-11	ELECT	2200uF	20%	16V
C1341	1-124-907-11	ELECT	10uF	20%	50V
C1346	1-124-925-11	ELECT	2. 2uF	20%	100V
C1351	1-124-122-11	ELECT	100uF	20%	50V
C1352	1-126-105-11	ELECT	1000uF	20%	35V
C1353	1-136-165-00	FILM	0. 1uF	5%	50V
C1354	1-136-165-00	FILM	0. 1uF	5%	50V
C1361	1-124-122-11	ELECT	100uF	20%	50V

Ref. No.	Part No.	Description		Remark
C1380	1-164-159-11	CERAMIC	0. 1uF	50V
		< FILTER >		
CF1	1-567-389-11	FILTER, CERAMIC		
CF2	1-567-389-11	FILTER, CERAMIC		
CF3	1-567-389-11	FILTER, CERAMIC (G, IT)		
CF4	1-527-981-00	FILTER, CERAMIC		
CF5	1-577-075-11	OSCILLATOR, CERAMIC		
CF6	1-760-220-11	FILTER, CERAMIC		
		< CONNECTOR >		
* CN1	1-568-830-11	SOCKET, CONNECTOR 11P		
* CN1201	1-537-327-11	TERMINAL BOARD (SPEAKER) (EXCEPT E, AUS, MX, PX)		
* CN1201	1-537-327-21	TERMINAL BOARD (SPEAKER) (E, AUS, MX, PX)		
CN1204	1-564-511-11	PLUG, CONNECTOR 8P		
* CN1205	1-564-509-11	PLUG, CONNECTOR 6P		
* CN1206	1-568-839-11	SOCKET, CONNECTOR 23P		
* CN1208	1-568-836-11	SOCKET, CONNECTOR 17P		
* CN1211	1-564-507-11	PLUG, CONNECTOR 4P		
CN1231	1-506-468-11	PIN, CONNECTOR 3P		
* CN1301	1-564-513-11	PLUG, CONNECTOR 10P		
* CN1302	1-566-210-11	PIN, CONNECTOR 3P (POWER SOURCE) (AEP2, UK, G)		
		< DIODE >		
D1	8-719-987-63	DIODE	1N4148M	
D1202	8-719-815-85	DIODE	1S1585 (D550)	
D1202	8-719-987-63	DIODE	1N4148M (A295)	
D1204	8-719-815-85	DIODE	1S1585 (D550)	
D1204	8-719-987-63	DIODE	1N4148M (A295)	
D1301	8-719-302-38	DIODE	RBV-602-01 (D550)	
D1301	8-719-312-09	DIODE	RBA-402 (A295)	
D1302	8-719-200-82	DIODE	11ES2	
D1303	8-719-200-82	DIODE	11ES2	
D1304	8-719-200-82	DIODE	11ES2	
D1305	8-719-200-82	DIODE	11ES2	
D1306	8-719-001-42	DIODE	UZL-11M1	
D1307	8-719-200-82	DIODE	11ES2	
D1308	8-719-002-60	DIODE	UZL-33L	
D1309	8-719-014-66	DIODE	UZP-5. 6B	
D1310	8-719-987-63	DIODE	1N4148M	
D1311	8-719-200-82	DIODE	11ES2	
D1312	8-719-200-82	DIODE	11ES2	
D1313	8-719-200-82	DIODE	11ES2	
D1314	8-719-200-82	DIODE	11ES2	
D1315	8-719-815-85	DIODE	1S1585 (D550)	
D1315	8-719-987-63	DIODE	1N4148M (A295)	

MAIN

Ref. No.	Part No.	Description	Remark
D1316	8-719-815-85	DIODE 1S1585 (D550)	
D1316	8-719-987-63	DIODE 1N4148M (A295)	
D1317	8-719-200-82	DIODE 11ES2	
D1318	8-719-200-82	DIODE 11ES2	
D1385	8-719-200-82	DIODE 11ES2	
		< FRONT END >	
FE1	1-465-007-11	FRONT END (4 GANG) (G, IT)	
FE1	1-465-673-11	FRONT END (2 BAND) (US, Canadian, UK)	
FE1	1-693-090-31	FRONT END (FM) (2 GANG) (AEP, E, AUS, MX, PX)	
FE2	1-239-260-11	ENCAPSULATED COMPONENT (E, G, IT, AUS, MX, PX)	
FE2	1-239-261-12	ENCAPSULATED COMPONENT (AEP, UK)	
FE2	1-239-634-11	ENCAPSULATED COMPONENT, AM. RF (US, Canadian)	
FE3	1-236-463-11	ENCAPSULATED COMPONENT (AEP, UK)	
		< IC >	
IC1	8-759-176-03	IC LA1835	
IC51	8-759-175-87	IC LC7218-ST	
IC1001	8-759-634-51	IC M5218AP	
IC1002	8-759-000-48	IC MC14052BCP	
IC1003	8-759-634-51	IC M5218AP	
IC1004	8-759-000-49	IC MC14066BCP	
IC1202	8-759-111-68	IC uPC1237HA	
IC1303	8-759-605-00	IC M5F78M07L	
IC1304	8-759-604-95	IC M5F79M07L	
IC1305	8-759-820-13	IC L78MR06	
IC1306	8-759-231-58	IC TA7812S (AEP2, UK, G)	
		< IFT >	
IFT1	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	
		< JACK >	
* J1001	1-580-912-11	JACK, PIN 4P (PHONO/VIDEO) (EXCEPT E, AUS, MX, PX)	
* J1001	1-580-912-21	JACK, PIN 4P (PHONO/VIDEO) (E, AUS, MX, PX)	
J1202	1-569-130-11	JACK, PIN 2P (SURROUND SPEAKER) (EXCEPT US, Canadian)	
		< COIL >	
L1	1-407-500-00	INDUCTOR 4.7mH (AEP, UK)	
L1	1-410-688-31	INDUCTOR 1.5mH (EXCEPT AEP, UK)	
L2	1-410-525-11	INDUCTOR 220uH (AEP, UK)	
L1201	1-420-872-00	COIL, AIR CORE	
L1251	1-420-872-00	COIL, AIR CORE	
L1301	1-408-117-00	INDUCTOR 10uH (G)	
L1302	1-408-117-00	INDUCTOR 10uH (G)	
		< FILTER >	
LPF1	1-239-597-11	FILTER, LOW PASS	
LPF2	1-239-597-11	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY	
Q2	8-729-201-53	TRANSISTOR 2SA1015-GR (G, IT)	
Q3	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP, UK)	
Q4	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP, UK)	
Q5	8-729-900-80	TRANSISTOR DTC114ES (AEP, UK)	
Q6	8-729-900-80	TRANSISTOR DTC114ES (AEP, UK)	
Q7	8-729-900-80	TRANSISTOR DTC114ES (AEP, UK)	
Q8	8-729-900-80	TRANSISTOR DTC114ES (AEP, UK)	
Q55	8-729-900-61	TRANSISTOR DTA114ES	
Q61	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q62	8-729-201-84	TRANSISTOR 2SC3112-B	
Q71	8-729-202-67	TRANSISTOR 2SK246-GR3 (AEP, UK)	
Q72	8-729-201-84	TRANSISTOR 2SC3112-B (AEP, UK)	
Q1001	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1006	8-729-900-36	TRANSISTOR DTC124ES	
Q1007	8-729-900-63	TRANSISTOR DTA124ES	
Q1008	8-729-900-36	TRANSISTOR DTC124ES	
Q1051	8-729-119-78	TRANSISTOR 2SC2785-HFE (A295)	
Q1204	8-729-900-63	TRANSISTOR DTA124ES	
Q1301	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1302	8-729-209-15	TRANSISTOR 2SD2012	
Q1381	8-729-900-80	TRANSISTOR DTC114ES	
Q1382	8-729-900-61	TRANSISTOR DTA114ES	
Q1383	8-729-900-80	TRANSISTOR DTC114ES	
		< RESISTOR >	
R1	1-249-411-11	CARBON 330 5% 1/4W	
R2	1-249-411-11	CARBON 330 5% 1/4W	
R3	1-249-409-11	CARBON 220 5% 1/4W	
⚠R4	1-249-402-11	CARBON 56 5% 1/4W	F
R5	1-247-891-00	CARBON 330K 5% 1/4W	
R6	1-249-411-11	CARBON 330 5% 1/4W	
R7	1-247-891-00	CARBON 330K 5% 1/4W	(G, IT)
R8	1-249-411-11	CARBON 330 5% 1/4W	(G, IT)
⚠R9	1-249-405-11	CARBON 100 5% 1/4W	F
R10	1-249-437-11	CARBON 47K 5% 1/4W	
R12	1-249-429-11	CARBON 10K 5% 1/4W	
R13	1-249-442-11	CARBON 510 5% 1/4W	
⚠R14	1-249-403-11	CARBON 68 5% 1/4W	F
R16	1-249-429-11	CARBON 10K 5% 1/4W	
R17	1-247-842-11	CARBON 3K 5% 1/4W	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remark
R18	1-249-429-11	CARBON	10K	5%	1/4W	
R19	1-249-441-11	CARBON	100K	5%	1/4W	
R20	1-249-435-11	CARBON	33K	5%	1/4W	
R21	1-249-441-11	CARBON	100K	5%	1/4W	
R22	1-249-437-11	CARBON	47K	5%	1/4W	
R23	1-249-399-11	CARBON	33	5%	1/4W	
R24	1-249-425-11	CARBON (AEP, UK)	4.7K	5%	1/4W	
R25	1-249-429-11	CARBON (AEP, UK)	10K	5%	1/4W	
R26	1-249-429-11	CARBON (AEP, UK)	10K	5%	1/4W	
R27	1-249-429-11	CARBON (AEP, UK)	10K	5%	1/4W	
R30	1-249-429-11	CARBON (AEP, UK)	10K	5%	1/4W	
R31	1-249-429-11	CARBON (AEP, UK)	10K	5%	1/4W	
R32	1-249-433-11	CARBON (AEP, UK)	22K	5%	1/4W	
R33	1-247-903-00	CARBON (AEP, UK)	1M	5%	1/4W	
R34	1-249-437-11	CARBON (AEP, UK)	47K	5%	1/4W	
R35	1-249-423-11	CARBON	3.3K	5%	1/4W	
R36	1-249-423-11	CARBON	3.3K	5%	1/4W	
R45	1-249-426-11	CARBON	5.6K	5%	1/4W	
R46	1-249-426-11	CARBON	5.6K	5%	1/4W	
R48	1-249-423-11	CARBON	3.3K	5%	1/4W	
R49	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R50	1-249-401-11	CARBON	47	5%	1/4W	F
R51	1-249-417-11	CARBON	1K	5%	1/4W	
R52	1-249-417-11	CARBON	1K	5%	1/4W	
R53	1-249-417-11	CARBON	1K	5%	1/4W	
R54	1-249-417-11	CARBON	1K	5%	1/4W	
R56	1-249-425-11	CARBON	4.7K	5%	1/4W	
R57	1-249-417-11	CARBON	1K	5%	1/4W	
R58	1-249-417-11	CARBON	1K	5%	1/4W	
⚠R60	1-249-405-11	CARBON	100	5%	1/4W	F
R61	1-249-423-11	CARBON	3.3K	5%	1/4W	
R62	1-249-425-11	CARBON	4.7K	5%	1/4W	
R63	1-249-414-11	CARBON	560	5%	1/4W	
R64	1-249-417-11	CARBON	1K	5%	1/4W	
R65	1-249-410-11	CARBON	270	5%	1/4W	
R66	1-249-421-11	CARBON	2.2K	5%	1/4W	
R67	1-249-425-11	CARBON	4.7K	5%	1/4W	
R68	1-249-425-11	CARBON	4.7K	5%	1/4W	
R69	1-247-807-31	CARBON	100	5%	1/4W	
R71	1-249-423-11	CARBON (AEP, UK)	3.3K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R72	1-249-433-11	CARBON (AEP, UK)	22K	5%	1/4W	
R73	1-249-414-11	CARBON (AEP, UK)	560	5%	1/4W	
R74	1-249-417-11	CARBON (AEP, UK)	1K	5%	1/4W	
R75	1-249-410-11	CARBON (AEP, UK)	270	5%	1/4W	
R76	1-249-421-11	CARBON (AEP, UK)	2.2K	5%	1/4W	
R77	1-249-425-11	CARBON (AEP, UK)	4.7K	5%	1/4W	
R78	1-247-807-31	CARBON (AEP, UK)	100	5%	1/4W	
R1001	1-249-417-11	CARBON	1K	5%	1/4W	
R1002	1-249-437-11	CARBON	47K	5%	1/4W	
R1003	1-249-416-11	CARBON	820	5%	1/4W	
R1004	1-247-897-11	CARBON	560K	5%	1/4W	
R1005	1-249-437-11	CARBON	47K	5%	1/4W	
R1006	1-249-409-11	CARBON	220	5%	1/4W	
R1007	1-249-441-11	CARBON	100K	5%	1/4W	
R1008	1-249-409-11	CARBON	220	5%	1/4W	(G, IT)
R1010	1-249-417-11	CARBON	1K	5%	1/4W	
R1016	1-249-437-11	CARBON	47K	5%	1/4W	
R1017	1-249-437-11	CARBON	47K	5%	1/4W	
R1021	1-249-434-11	CARBON	27K	5%	1/4W	
R1023	1-249-434-11	CARBON	27K	5%	1/4W	
R1024	1-249-417-11	CARBON	1K	5%	1/4W	(G, IT)
R1031	1-249-433-11	CARBON	22K	5%	1/4W	
R1032	1-249-417-11	CARBON	1K	5%	1/4W	
R1033	1-249-433-11	CARBON	22K	5%	1/4W	
R1034	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1035	1-249-433-11	CARBON	22K	5%	1/4W	
R1037	1-249-437-11	CARBON	47K	5%	1/4W	
R1041	1-249-417-11	CARBON	1K	5%	1/4W	
R1042	1-249-441-11	CARBON	100K	5%	1/4W	
R1051	1-249-417-11	CARBON	1K	5%	1/4W	
R1052	1-249-437-11	CARBON	47K	5%	1/4W	
R1053	1-249-416-11	CARBON	820	5%	1/4W	
R1054	1-247-897-11	CARBON	560K	5%	1/4W	
R1055	1-249-437-11	CARBON	47K	5%	1/4W	
R1056	1-249-409-11	CARBON	220	5%	1/4W	
R1057	1-249-441-11	CARBON	100K	5%	1/4W	
R1058	1-249-409-11	CARBON	220	5%	1/4W	(G, IT)
R1060	1-249-417-11	CARBON	1K	5%	1/4W	
R1071	1-249-434-11	CARBON	27K	5%	1/4W	
R1073	1-249-434-11	CARBON (EXCEPT E, AUS, MX, PX)	27K	5%	1/4W	
R1074	1-249-417-11	CARBON	1K	5%	1/4W	(G, IT)
R1084	1-249-425-11	CARBON	4.7K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN

Ref. No.	Part No.	Description				Remark
R1085	1-249-433-11	CARBON	22K	5%	1/4W	
R1087	1-249-437-11	CARBON	47K	5%	1/4W	
R1091	1-249-417-11	CARBON	1K	5%	1/4W	
R1092	1-249-441-11	CARBON	100K	5%	1/4W	
R1220	1-249-393-11	CARBON (A295)	10	5%	1/4W	
R1220	1-249-397-11	CARBON (D550)	22	5%	1/4W	
R1221	1-249-397-11	CARBON (D550)	22	5%	1/4W	
R1222	1-249-415-11	CARBON (A295)	680	5%	1/4W	
R1222	1-249-419-11	CARBON (D550)	1.5K	5%	1/4W	
R1223	1-249-415-11	CARBON (A295)	680	5%	1/4W	
R1223	1-249-419-11	CARBON (D550)	1.5K	5%	1/4W	
⚠R1226	1-216-454-11	METAL OXIDE (A295)	390	5%	2W	F
⚠R1226	1-216-481-11	METAL OXIDE (D550)	1.2K	5%	3W	F
R1233	1-247-854-11	CARBON (D550)	9.1K	5%	1/4W	
R1233	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1234	1-247-854-11	CARBON (D550)	9.1K	5%	1/4W	
R1234	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1235	1-249-435-11	CARBON (A295)	33K	5%	1/4W	
R1235	1-249-437-11	CARBON (D550)	47K	5%	1/4W	
R1236	1-249-441-11	CARBON	100K	5%	1/4W	
R1237	1-249-429-11	CARBON	10K	5%	1/4W	
R1240	1-249-438-11	CARBON	56K	5%	1/4W	
R1241	1-249-389-11	CARBON (AEP, UK, G, IT)	4.7	5%	1/4W	
R1242	1-249-389-11	CARBON (AEP, UK, G, IT)	4.7	5%	1/4W	
R1270	1-249-393-11	CARBON (A295)	10	5%	1/4W	
R1270	1-249-397-11	CARBON (D550)	22	5%	1/4W	
R1271	1-249-397-11	CARBON (D550)	22	5%	1/4W	
R1272	1-249-415-11	CARBON (A295)	680	5%	1/4W	
R1272	1-249-419-11	CARBON (D550)	1.5K	5%	1/4W	
R1273	1-249-415-11	CARBON (A295)	680	5%	1/4W	
R1273	1-249-419-11	CARBON (D550)	1.5K	5%	1/4W	
R1290	1-249-437-11	CARBON	47K	5%	1/4W	
R1301	1-249-429-11	CARBON (A295)	10K	5%	1/4W	
R1301	1-249-430-11	CARBON (D550)	12K	5%	1/4W	
R1302	1-249-429-11	CARBON (A295)	10K	5%	1/4W	
R1302	1-249-430-11	CARBON (D550)	12K	5%	1/4W	
R1303	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1304	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1321	1-249-417-11	CARBON	1K	5%	1/4W	
R1322	1-249-429-11	CARBON	10K	5%	1/4W	
R1345	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1381	1-249-417-11	CARBON	1K	5%	1/4W	

< VARIABLE RESISTOR >

RV1	1-238-601-11	RES, ADJ, CARBON 22K
RV2	1-238-600-11	RES, ADJ, CARBON 10K

< RELAY >

RY1201	1-515-920-11	RELAY (24V) (A295)
RY1201	1-515-501-00	RELAY (D550)

< TERMINAL >

* TM1	1-537-264-11	TERMINAL BOARD (ANTENNA) (EXCEPT AEP, G, IT)
* TM1	1-537-288-11	TERMINAL BOARD, ANTENNA (PAL) (ANTENNA) (AEP, G, IT)

< VIBRATOR >

XT51	1-577-126-21	VIBRATOR, CRYSTAL (7.2MHz) (EXCEPT E, AUS, MX, PX)
XT51	1-577-126-31	VIBRATOR, CRYSTAL (7.2MHz) (E, AUS, MX, PX)

****

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
*	A-4365-772-A	MAIN TC BOARD, COMPLETE (E, AUS, MX, PX)			
*	A-4365-787-A	MAIN TC BOARD, COMPLETE (US, Canadian, AEP, UK)			
*	A-4371-005-A	MAIN TC BOARD, COMPLETE (G, IT)			
		**********			
*	4-942-204-01	PLATE, GROUND			
		< CAPACITOR >			
C700	1-162-282-31	CERAMIC	100PF	10%	50V
C701	1-162-290-31	CERAMIC	470PF	10%	50V
C702	1-137-372-11	FILM	0.022uF	5%	50V
C703	1-124-907-11	ELECT	10uF	20%	50V
C704	1-162-292-31	CERAMIC	680PF	10%	50V
C710	1-162-282-31	CERAMIC	100PF	10%	50V
C711	1-162-289-31	CERAMIC	390PF	10%	50V
C712	1-137-372-11	FILM	0.022uF	5%	50V
C713	1-124-907-11	ELECT	10uF	20%	50V
C715	1-124-443-00	ELECT	100uF	20%	10V
C721	1-137-368-11	FILM	0.0047uF	5%	50V
C722	1-124-903-11	ELECT	1uF	20%	50V
C723	1-124-927-11	ELECT	4.7uF	20%	100V
C724	1-137-399-11	FILM (EXCEPT E, AUS, MX, PX)	0.1uF	5%	50V
C724	1-164-095-11	CERAMIC (E, AUS, MX, PX)	0.01uF	10%	16V
C725	1-124-907-11	ELECT	10uF	20%	50V
C726	1-124-903-11	ELECT	1uF	20%	50V
C727	1-124-902-00	ELECT	0.47uF	20%	50V
C728	1-124-927-11	ELECT	4.7uF	20%	100V
C729	1-162-291-31	CERAMIC	560PF	10%	50V
C730	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C731	1-164-056-11	CERAMIC	27PF	5%	50V
C732	1-101-890-00	CERAMIC	75PF	5%	50V
C733	1-162-288-31	CERAMIC	330PF	10%	50V
C734	1-164-066-11	CERAMIC	68PF	5%	50V
C800	1-162-282-31	CERAMIC	100PF	10%	50V
C801	1-162-290-31	CERAMIC	470PF	10%	50V
C802	1-137-372-11	FILM	0.022uF	5%	50V
C803	1-124-907-11	ELECT	10uF	20%	50V
C804	1-162-292-31	CERAMIC	680PF	10%	50V
C810	1-162-282-31	CERAMIC	100PF	10%	50V
C811	1-162-289-31	CERAMIC	390PF	10%	50V
C812	1-137-372-11	FILM	0.022uF	5%	50V
C813	1-124-907-11	ELECT	10uF	20%	50V
C815	1-124-443-00	ELECT	100uF	20%	10V
C821	1-137-368-11	FILM	0.0047uF	5%	50V
C822	1-124-903-11	ELECT	1uF	20%	50V
C823	1-124-927-11	ELECT	4.7uF	20%	100V
C824	1-137-399-11	FILM (EXCEPT E, AUS, MX, PX)	0.1uF	5%	50V
C824	1-164-095-11	CERAMIC (E, AUS, MX, PX)	0.01uF	10%	16V
C825	1-124-907-11	ELECT	10uF	20%	50V
C826	1-124-903-11	ELECT	1uF	20%	50V
C827	1-124-902-00	ELECT	0.47uF	20%	50V
C828	1-124-927-11	ELECT	4.7uF	20%	100V
C829	1-162-291-31	CERAMIC	560PF	10%	50V
C830	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C831	1-164-056-11	CERAMIC	27PF	5%	50V
C832	1-101-890-00	CERAMIC	75PF	5%	50V
C833	1-162-288-31	CERAMIC	330PF	10%	50V
C834	1-164-066-11	CERAMIC	68PF	5%	50V
C903	1-124-443-00	ELECT	100uF	20%	10V
C904	1-124-443-00	ELECT	100uF	20%	10V
C905	1-124-443-00	ELECT	100uF	20%	10V
C906	1-124-443-00	ELECT	100uF	20%	10V
C907	1-124-443-00	ELECT	100uF	20%	10V
C908	1-124-443-00	ELECT	100uF	20%	10V
C909	1-124-907-11	ELECT	10uF	20%	50V
C910	1-124-907-11	ELECT	10uF	20%	50V
C913	1-124-927-11	ELECT	4.7uF	20%	100V
C915	1-126-933-11	ELECT	100uF	20%	16V
C920	1-161-379-00	CERAMIC	0.01uF	20%	25V
C921	1-124-925-11	ELECT	2.2uF	20%	100V
C922	1-137-460-91	FILM	0.0082uF	5%	100V
C923	1-124-902-00	ELECT	0.47uF	20%	50V
C924	1-137-438-11	FILM	0.0082uF	5%	50V
C925	1-161-329-00	CERAMIC	0.0068uF	30%	16V
C926	1-137-436-11	FILM	0.0039uF	5%	50V
C927	1-137-436-11	FILM	0.0039uF	5%	50V
C928	1-137-399-11	FILM	0.1uF	5%	50V
C929	1-124-120-11	ELECT	220uF	20%	25V
C931	1-124-120-11	ELECT	220uF	20%	25V
C942	1-124-927-11	ELECT (EXCEPT E, AUS, MX, PX)	4.7uF	20%	100V
C943	1-124-903-11	ELECT	1uF	20%	50V
C944	1-124-907-11	ELECT	10uF	20%	50V
C945	1-161-379-00	CERAMIC	0.01uF	20%	25V
C946	1-124-925-11	ELECT	2.2uF	20%	100V
		< CONNECTOR >			
* CN901	1-564-507-11	PLUG, CONNECTOR 4P			
* CN902	1-564-508-11	PLUG, CONNECTOR 5P			
CN903	1-564-506-11	PLUG, CONNECTOR 3P			
* CN904	1-564-509-11	PLUG, CONNECTOR 6P			
CN905	1-564-505-11	PLUG, CONNECTOR 2P			
* CN906	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			

MAIN TC

Ref. No.	Part No.	Description	Remark
* CN911	1-560-061-00	PIN, CONNECTOR 3P	
* CN912	1-560-060-00	PIN, CONNECTOR 2P	
		< DIODE >	
D901	8-719-987-63	DIODE 1N4148M	
D902	8-719-987-63	DIODE 1N4148M	
D903	8-719-987-63	DIODE 1N4148M	
D904	8-719-987-63	DIODE 1N4148M	
D905	8-719-987-63	DIODE 1N4148M	
D906	8-719-987-63	DIODE 1N4148M	
D907	8-719-987-63	DIODE 1N4148M	
D908	8-719-987-63	DIODE 1N4148M	
D909	8-719-987-63	DIODE 1N4148M	
		< IC >	
IC903	8-759-098-73	IC HA12172NT (EXCEPT E, AUS, MX, PX)	
IC903	8-759-198-48	IC HA12184NT (E, AUS, MX, PX)	
IC904	8-759-111-44	IC uPC4570C-1	
IC905	8-759-111-44	IC uPC4570C-1	
IC906	8-759-143-54	IC uPC1330HA	
IC907	8-759-240-81	IC TC4081BP	
		< COIL >	
L701	1-410-780-11	INDUCTOR 27mH	
L801	1-410-780-11	INDUCTOR 27mH	
L901	1-414-223-11	INDUCTOR 470uH	
		< TRANSISTOR >	
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q901	8-729-194-57	TRANSISTOR 2SC945-P	
Q902	8-729-194-57	TRANSISTOR 2SC945-P	
Q903	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q904	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q906	8-729-900-89	TRANSISTOR DTC144ES	
Q907	8-729-900-89	TRANSISTOR DTC144ES	
Q908	8-729-900-89	TRANSISTOR DTC144ES (EXCEPT E, AUS, MX, PX)	
Q909	8-729-900-89	TRANSISTOR DTC144ES	
Q910	8-729-900-65	TRANSISTOR DTA144ES	
Q911	8-729-900-65	TRANSISTOR DTA144ES	
Q912	8-729-900-89	TRANSISTOR DTC144ES	
		< RESISTOR >	
R701	1-247-889-00	CARBON 270K 5% 1/4W	
R702	1-249-404-00	CARBON 82 5% 1/4W	
R703	1-247-882-11	CARBON 130K 5% 1/4W	
R704	1-247-850-11	CARBON 6.2K 5% 1/4W	
R711	1-247-889-00	CARBON 270K 5% 1/4W	
R712	1-249-404-00	CARBON 82 5% 1/4W	
R713	1-247-882-11	CARBON 130K 5% 1/4W	
R714	1-247-850-11	CARBON 6.2K 5% 1/4W	
R715	1-249-433-11	CARBON 22K 5% 1/4W	
R720	1-249-425-11	CARBON 4.7K 5% 1/4W	
R721	1-249-429-11	CARBON 10K 5% 1/4W	
R722	1-249-431-11	CARBON 15K 5% 1/4W	
R723	1-249-429-11	CARBON 10K 5% 1/4W	
R724	1-249-421-11	CARBON 2.2K 5% 1/4W	
R725	1-249-428-11	CARBON 8.2K 5% 1/4W	
R726	1-247-840-00	CARBON 2.4K 5% 1/4W	
R727	1-249-433-11	CARBON 22K 5% 1/4W	
R728	1-249-417-11	CARBON 1K 5% 1/4W	
R731	1-249-430-11	CARBON 12K 5% 1/4W	
R801	1-247-889-00	CARBON 270K 5% 1/4W	
R802	1-249-404-00	CARBON 82 5% 1/4W	
R803	1-247-882-11	CARBON 130K 5% 1/4W	
R804	1-247-850-11	CARBON 6.2K 5% 1/4W	
R811	1-247-889-00	CARBON 270K 5% 1/4W	
R812	1-249-404-00	CARBON 82 5% 1/4W	
R813	1-247-882-11	CARBON 130K 5% 1/4W	
R814	1-247-850-11	CARBON 6.2K 5% 1/4W	
R815	1-249-433-11	CARBON 22K 5% 1/4W	
R820	1-249-425-11	CARBON 4.7K 5% 1/4W	
R821	1-249-429-11	CARBON 10K 5% 1/4W	
R822	1-249-431-11	CARBON 15K 5% 1/4W	
R823	1-249-429-11	CARBON 10K 5% 1/4W	
R824	1-249-421-11	CARBON 2.2K 5% 1/4W	
R825	1-249-428-11	CARBON 8.2K 5% 1/4W	
R826	1-247-840-00	CARBON 2.4K 5% 1/4W	
R827	1-249-433-11	CARBON 22K 5% 1/4W	
R828	1-249-417-11	CARBON 1K 5% 1/4W	
R831	1-249-430-11	CARBON 12K 5% 1/4W	
R902	1-249-389-11	CARBON 4.7 5% 1/4W	
R903	1-249-413-11	CARBON 470 5% 1/4W	
R904	1-249-413-11	CARBON 470 5% 1/4W	
R905	1-249-413-11	CARBON 470 5% 1/4W	
R906	1-249-413-11	CARBON 470 5% 1/4W	
R910	1-249-437-11	CARBON 47K 5% 1/4W (E, AUS, MX, PX)	
R911	1-215-451-00	METAL 18K 1% 1/6W (EXCEPT E, AUS, MX, PX)	
R911	1-249-432-11	CARBON 18K 5% 1/4W (E, AUS, MX, PX)	
R912	1-249-440-11	CARBON 82K 5% 1/4W	
R913	1-247-862-11	CARBON 20K 5% 1/4W	
R914	1-249-437-11	CARBON 47K 5% 1/4W	
R915	1-249-437-11	CARBON 47K 5% 1/4W	

Ref. No.	Part No.	Description			Remark
R916	1-249-437-11	CARBON	47K	5%	1/4W
R917	1-247-864-11	CARBON	24K	5%	1/4W
R918	1-249-437-11	CARBON	47K	5%	1/4W
		(EXCEPT E, AUS, MX, PX)			
R919	1-249-433-11	CARBON	22K	5%	1/4W
R920	1-249-429-11	CARBON	10K	5%	1/4W
R921	1-249-424-11	CARBON	3.9K	5%	1/4W
R922	1-249-389-11	CARBON	4.7	5%	1/4W
R923	1-249-434-11	CARBON	27K	5%	1/4W
R924	1-249-434-11	CARBON	27K	5%	1/4W
R925	1-249-429-11	CARBON	10K	5%	1/4W
R926	1-249-389-11	CARBON	4.7	5%	1/4W
⚠R931	1-215-905-11	METAL OXIDE	10	5%	3W F
R932	1-249-426-11	CARBON	5.6K	5%	1/4W
R933	1-249-442-11	CARBON	510	5%	1/4W
R934	1-249-441-11	CARBON	100K	5%	1/4W
R935	1-249-441-11	CARBON	100K	5%	1/4W
R936	1-249-429-11	CARBON	10K	5%	1/4W
R941	1-249-436-11	CARBON	39K	5%	1/4W
R942	1-249-433-11	CARBON	22K	5%	1/4W
		(EXCEPT E, AUS, MX, PX)			
R943	1-249-436-11	CARBON	39K	5%	1/4W
R944	1-249-425-11	CARBON	4.7K	5%	1/4W
R945	1-249-433-11	CARBON	22K	5%	1/4W
R946	1-249-421-11	CARBON	2.2K	5%	1/4W
R947	1-249-421-11	CARBON	2.2K	5%	1/4W
R948	1-249-433-11	CARBON	22K	5%	1/4W
R949	1-249-438-11	CARBON	56K	5%	1/4W
R950	1-249-437-11	CARBON	47K	5%	1/4W
R951	1-249-437-11	CARBON	47K	5%	1/4W
R952	1-249-441-11	CARBON	100K	5%	1/4W
R953	1-249-425-11	CARBON	4.7K	5%	1/4W
R954	1-249-429-11	CARBON	10K	5%	1/4W
R955	1-249-441-11	CARBON	100K	5%	1/4W
R956	1-249-441-11	CARBON	100K	5%	1/4W
R957	1-249-429-11	CARBON	10K	5%	1/4W

< VARIABLE RESISTOR >

RV701	1-230-496-11	RES, ADJ, CARBON 10K
RV702	1-230-496-11	RES, ADJ, CARBON 10K
RV703	1-230-496-11	RES, ADJ, CARBON 10K
RV704	1-230-499-11	RES, ADJ, CARBON 100K
RV801	1-230-496-11	RES, ADJ, CARBON 10K
RV802	1-230-496-11	RES, ADJ, CARBON 10K
RV803	1-230-496-11	RES, ADJ, CARBON 10K
RV804	1-230-499-11	RES, ADJ, CARBON 100K
RV901	1-230-495-11	RES, ADJ, CARBON 2.2K
RV902	1-230-495-11	RES, ADJ, CARBON 2.2K

Ref. No.	Part No.	Description	Remark
		< TRANSFORMER >	
T901	1-433-349-11	TRANSFORMER, BIAS OSCILLATION	
**********			
*	1-638-731-11	OPEN/UP SW BOARD	
		**********	
		< CONNECTOR >	
* CN705	1-566-214-11	PIN, CONNECTOR (PC BOARD) 2P	
		< SWITCH >	
S702	1-571-300-21	SWITCH, ROTARY (OPEN/UP)	
**********			
*	A-4365-891-A	PANEL BOARD, COMPLETE (AEP, UK)	
*	A-4365-913-A	PANEL BOARD, COMPLETE (E, AUS, MX, PX)	
*	A-4365-929-A	PANEL BOARD, COMPLETE (D550)	
*	A-4369-096-A	PANEL BOARD, COMPLETE (IT)	
*	A-4369-256-A	PANEL BOARD, COMPLETE (Canadian)	
*	A-4369-603-A	PANEL BOARD, COMPLETE (G)	
		**********	
*	4-949-935-01	CUSHION (FL)	
*	4-949-935-21	CUSHION (FL)	
*	4-955-792-01	HOLDER (5M), FL TUBE	
*	4-962-699-01	HOLDER, FL TUBE	
		< CAPACITOR >	

C601	1-164-159-11	CERAMIC	0.1uF		50V
C602	1-124-261-00	ELECT	10uF	20%	50V
C603	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C604	1-164-159-11	CERAMIC	0.1uF		50V
C605	1-136-169-00	FILM	0.22uF	5%	50V
C607	1-161-379-00	CERAMIC	0.01uF	20%	25V
C608	1-161-379-00	CERAMIC	0.01uF	20%	25V
C609	1-124-910-11	ELECT	47uF	20%	50V
C610	1-161-379-00	CERAMIC	0.01uF	20%	25V
C661	1-126-301-11	ELECT	1uF	20%	50V
C662	1-126-301-11	ELECT	1uF	20%	50V
C1102	1-124-589-11	ELECT	47uF	20%	16V
C1103	1-162-282-31	CERAMIC	100PF	10%	50V
C1104	1-124-257-00	ELECT	2.2uF	20%	50V
C1105	1-124-464-11	ELECT	0.22uF	20%	50V
C1106	1-137-374-11	FILM	0.047uF	5%	50V
C1107	1-124-464-11	ELECT	0.22uF	20%	50V
C1108	1-137-442-11	FILM	0.039uF	5%	50V
C1109	1-137-441-11	FILM	0.027uF	5%	50V
C1110	1-137-457-11	FILM	0.0027uF	5%	50V
C1111	1-161-327-00	CERAMIC	0.0033uF	20%	16V
C1112	1-162-293-31	CERAMIC	820PF	10%	50V

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

PANEL

Ref.No.	Part No.	Description			Remark
C1113	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1114	1-124-589-11	ELECT	47uF	20%	16V
C1115	1-124-257-00	ELECT	2.2uF	20%	50V
C1120	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1121	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1123	1-162-282-31	CERAMIC	100PF	10%	50V
C1143	1-126-176-11	ELECT	220uF	20%	10V
C1152	1-124-589-11	ELECT	47uF	20%	16V
C1153	1-162-282-31	CERAMIC	100PF	10%	50V
C1154	1-124-257-00	ELECT	2.2uF	20%	50V
C1155	1-124-464-11	ELECT	0.22uF	20%	50V
C1156	1-137-374-11	FILM	0.047uF	5%	50V
C1157	1-124-464-11	ELECT	0.22uF	20%	50V
C1158	1-137-442-11	FILM	0.039uF	5%	50V
C1159	1-137-441-11	FILM	0.027uF	5%	50V
C1160	1-137-457-11	FILM	0.0027uF	5%	50V
C1161	1-161-327-00	CERAMIC	0.0033uF	20%	16V
C1162	1-162-293-31	CERAMIC	820PF	10%	50V
C1163	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1164	1-124-589-11	ELECT	47uF	20%	16V
C1165	1-124-257-00	ELECT	2.2uF	20%	50V
C1173	1-162-282-31	CERAMIC	100PF	10%	50V
C1197	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1501	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1502	1-124-234-00	ELECT	22uF	20%	16V
C1503	1-124-234-00	ELECT	22uF	20%	16V
C1508	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1509	1-126-163-11	ELECT	4.7uF	20%	50V
C1510	1-124-234-00	ELECT	22uF	20%	16V
C1511	1-124-584-00	ELECT	100uF	20%	10V
C1512	1-164-159-11	CERAMIC	0.1uF		50V
C1513	1-164-159-11	CERAMIC	0.1uF		50V
C1514	1-124-584-00	ELECT	100uF	20%	10V

< CONNECTOR >

* CN601	1-568-830-11	SOCKET, CONNECTOR 11P	
* CN1101	1-568-839-11	SOCKET, CONNECTOR 23P	
CN1102	1-506-469-11	PIN, CONNECTOR 4P	

< COMPOSITION CIRCUIT BLOCK >

* CP603	1-233-216-11	COMPOSITION CIRCUIT BLOCK	
CP1511	1-239-054-11	COMPOSITION CIRCUIT BLOCK	
CP1512	1-239-054-11	COMPOSITION CIRCUIT BLOCK	

< DIODE >

D601	8-719-987-63	DIODE	1N4148M
D602	8-719-987-63	DIODE	1N4148M
D603	8-719-987-63	DIODE	1N4148M
D604	8-719-200-82	DIODE	11ES2
D621	8-719-987-63	DIODE	1N4148M (G)
D622	8-719-987-63	DIODE	1N4148M (US, Canadian, IT)
D623	8-719-987-63	DIODE	1N4148M (E, IT, AUS, MX, PX)
D625	8-719-987-63	DIODE	1N4148M
D1130	8-719-038-63	LED	SEL5220S-TH8C (VIDEO)
D1131	8-719-038-63	LED	SEL5220S-TH8C (TAPE)
D1132	8-719-038-63	LED	SEL5220S-TH8C (CD)
D1133	8-719-038-63	LED	SEL5220S-TH8C (TUNER)
D1134	8-719-038-63	LED	SEL5220S-TH8C (PHONO)
D1145	8-719-038-63	LED	SEL5220S-TH8C (VOLUME)
D1150	8-719-987-63	DIODE	1N4148M
D1151	8-719-987-63	DIODE	1N4148M
D1152	8-719-987-63	DIODE	1N4148M
D1160	8-719-038-63	LED	SEL5220S-TH8C (FLAT)
D1161	8-719-038-63	LED	SEL5220S-TH8C (DANCE)
D1162	8-719-038-63	LED	SEL5220S-TH8C (POPS)
D1163	8-719-038-63	LED	SEL5220S-TH8C (ROCK)
D1164	8-719-038-63	LED	SEL5220S-TH8C (CLASSIC)
D1171	8-719-987-63	DIODE	1N4148M

< FLUORESCENT INDICATOR >

FL601	1-517-259-11	INDICATOR TUBE, FLUORESCENT	
FL1501	1-517-260-11	INDICATOR TUBE, FLUORESCENT	

< IC >

IC601	8-759-248-06	IC	uPD78042GF-053-3B9
IC602	8-749-920-83	IC	GP1U52XB
IC1101	8-759-634-51	IC	M5218AP
IC1102	8-759-634-51	IC	M5218AP
IC1103	8-759-820-62	IC	LB1639
IC1104	8-759-916-12	IC	SN74HC00AN
IC1106	8-759-000-48	IC	MC14052BCP
IC1501	8-759-065-87	IC	XR-1096

< COIL >

L601	1-410-521-11	INDUCTOR	100uH
L1101	1-410-624-11	INDUCTOR	560uH
L1102	1-408-080-00	INDUCTOR	100uH

< TRANSISTOR >

Q601	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q602	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q603	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1101	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1102	8-729-141-26	TRANSISTOR	2SC3622A-LK
Q1103	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1104	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1105	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1121	8-729-900-61	TRANSISTOR	DTA114ES

Ref. No.	Part No.	Description				Remark
Q1124	8-729-900-36	TRANSISTOR	DTC124ES			
Q1125	8-729-900-36	TRANSISTOR	DTC124ES			
Q1126	8-729-900-36	TRANSISTOR	DTC124ES			
Q1141	8-729-900-63	TRANSISTOR	DTA124ES			
Q1143	8-729-900-80	TRANSISTOR	DTC114ES			
Q1144	8-729-900-80	TRANSISTOR	DTC114ES			
Q1145	8-729-900-61	TRANSISTOR	DTA114ES			
Q1147	8-729-900-36	TRANSISTOR	DTC124ES			
Q1148	8-729-900-63	TRANSISTOR	DTA124ES			
Q1151	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q1152	8-729-141-26	TRANSISTOR	2SC3622A-LK			
Q1153	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q1154	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q1155	8-729-119-78	TRANSISTOR	2SC2785-HFE			
		< RESISTOR >				
R601	1-249-417-11	CARBON	1K	5%	1/4W	
R603	1-249-437-11	CARBON	47K	5%	1/4W	
R604	1-249-433-11	CARBON	22K	5%	1/4W	
R605	1-249-433-11	CARBON	22K	5%	1/4W	
R606	1-249-429-11	CARBON	10K	5%	1/4W	
R607	1-249-429-11	CARBON	10K	5%	1/4W	
R608	1-249-423-11	CARBON	3.3K	5%	1/4W	
R609	1-249-417-11	CARBON	1K	5%	1/4W	
R610	1-249-425-11	CARBON	4.7K	5%	1/4W	
R611	1-249-429-11	CARBON	10K	5%	1/4W	
R613	1-249-429-11	CARBON	10K	5%	1/4W	
R614	1-249-429-11	CARBON	10K	5%	1/4W	
R615	1-249-433-11	CARBON	22K	5%	1/4W	
R616	1-249-433-11	CARBON	22K	5%	1/4W	
R621	1-249-419-11	CARBON	1.5K	5%	1/4W	
R622	1-247-807-31	CARBON	100	5%	1/4W	
R623	1-249-406-11	CARBON	120	5%	1/4W	
R624	1-249-406-11	CARBON	120	5%	1/4W	
R625	1-247-811-31	CARBON	150	5%	1/4W	
R626	1-249-408-11	CARBON	180	5%	1/4W	
R627	1-249-409-11	CARBON	220	5%	1/4W	
R628	1-249-410-11	CARBON	270	5%	1/4W	
R629	1-249-411-11	CARBON	330	5%	1/4W	
R630	1-249-413-11	CARBON	470	5%	1/4W	
R631	1-249-414-11	CARBON	560	5%	1/4W	
R632	1-249-416-11	CARBON	820	5%	1/4W	
R633	1-249-418-11	CARBON	1.2K	5%	1/4W	
R634	1-249-421-11	CARBON	2.2K	5%	1/4W	
R635	1-249-419-11	CARBON	1.5K	5%	1/4W	
R636	1-247-807-31	CARBON	100	5%	1/4W	
R637	1-249-406-11	CARBON	120	5%	1/4W	
R638	1-249-406-11	CARBON	120	5%	1/4W	
R639	1-247-811-31	CARBON	150	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R640	1-249-408-11	CARBON	180	5%	1/4W	
R641	1-249-409-11	CARBON	220	5%	1/4W	
R642	1-249-410-11	CARBON	270	5%	1/4W	
R643	1-249-411-11	CARBON	330	5%	1/4W	
R644	1-249-413-11	CARBON	470	5%	1/4W	
R645	1-249-414-11	CARBON	560	5%	1/4W	
R646	1-249-416-11	CARBON	820	5%	1/4W	
R647	1-249-418-11	CARBON	1.2K	5%	1/4W	
R648	1-249-421-11	CARBON	2.2K	5%	1/4W	
R649	1-249-424-11	CARBON	3.9K	5%	1/4W	
R653	1-249-388-11	CARBON	3.9	5%	1/6W	
R661	1-249-417-11	CARBON	1K	5%	1/4W	
R662	1-249-417-11	CARBON	1K	5%	1/4W	
R663	1-249-417-11	CARBON	1K	5%	1/4W	
R664	1-249-417-11	CARBON	1K	5%	1/4W	
R665	1-249-417-11	CARBON	1K	5%	1/4W	
R666	1-249-417-11	CARBON	1K	5%	1/4W	
R672	1-249-441-11	CARBON	100K	5%	1/4W	
R673	1-249-409-11	CARBON	220	5%	1/4W	
R1102	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1103	1-249-431-11	CARBON	15K	5%	1/4W	
R1104	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1104	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1105	1-249-433-11	CARBON	22K	5%	1/4W	
R1106	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1107	1-249-441-11	CARBON	100K	5%	1/4W	
R1108	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1109	1-249-412-11	CARBON	390	5%	1/4W	
R1110	1-249-417-11	CARBON	1K	5%	1/4W	
R1111	1-249-441-11	CARBON	100K	5%	1/4W	
R1114	1-249-431-11	CARBON	15K	5%	1/4W	
R1115	1-249-439-11	CARBON	68K	5%	1/4W	
R1116	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1117	1-249-440-11	CARBON	82K	5%	1/4W	
R1118	1-249-412-11	CARBON	390	5%	1/4W	
R1119	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1120	1-247-862-11	CARBON	20K	5%	1/4W	
R1122	1-249-433-11	CARBON	22K	5%	1/4W	
R1123	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1124	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1125	1-249-433-11	CARBON	22K	5%	1/4W	
R1126	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1127	1-249-440-11	CARBON	82K	5%	1/4W	
R1128	1-249-412-11	CARBON	390	5%	1/4W	
R1129	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1130	1-247-862-11	CARBON	20K	5%	1/4W	
R1131	1-249-434-11	CARBON	27K	5%	1/4W	

PANEL

Ref. No.	Part No.	Description				Remark
R1132	1-249-412-11	CARBON	390	5%	1/4W	
R1135	1-249-433-11	CARBON	22K	5%	1/4W	
R1136	1-249-412-11	CARBON	390	5%	1/4W	
R1137	1-249-412-11	CARBON	390	5%	1/4W	
R1138	1-249-412-11	CARBON	390	5%	1/4W	
R1139	1-249-417-11	CARBON	1K	5%	1/4W	
R1141	1-249-437-11	CARBON	47K	5%	1/4W	
R1142	1-249-412-11	CARBON	390	5%	1/4W	
R1143	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1145	1-249-412-11	CARBON	390	5%	1/4W	
R1149	1-247-874-11	CARBON	62K	5%	1/4W	
R1152	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1154	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1154	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1155	1-249-433-11	CARBON	22K	5%	1/4W	
R1156	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1157	1-249-441-11	CARBON	100K	5%	1/4W	
R1158	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1159	1-249-412-11	CARBON	390	5%	1/4W	
R1160	1-249-417-11	CARBON	1K	5%	1/4W	
R1161	1-249-441-11	CARBON	100K	5%	1/4W	
R1164	1-249-431-11	CARBON	15K	5%	1/4W	
R1165	1-249-439-11	CARBON	68K	5%	1/4W	
R1166	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1167	1-249-440-11	CARBON	82K	5%	1/4W	
R1168	1-249-412-11	CARBON	390	5%	1/4W	
R1169	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1170	1-247-862-11	CARBON	20K	5%	1/4W	
R1172	1-249-433-11	CARBON	22K	5%	1/4W	
R1173	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1174	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1176	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1177	1-249-440-11	CARBON	82K	5%	1/4W	
R1178	1-249-412-11	CARBON	390	5%	1/4W	
R1179	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1180	1-247-862-11	CARBON	20K	5%	1/4W	
R1181	1-249-434-11	CARBON	27K	5%	1/4W	
R1183	1-249-437-11	CARBON	47K	5%	1/4W	
R1184	1-249-437-11	CARBON	47K	5%	1/4W	
R1185	1-249-437-11	CARBON	47K	5%	1/4W	
R1189	1-249-417-11	CARBON	1K	5%	1/4W	
R1191	1-249-437-11	CARBON	47K	5%	1/4W	
R1192	1-249-412-11	CARBON	390	5%	1/4W	
R1193	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1194	1-249-433-11	CARBON	22K	5%	1/4W	
R1195	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1196	1-249-425-11	CARBON	4.7K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R1199	1-247-874-11	CARBON	62K	5%	1/4W	
R1501	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1502	1-247-881-00	CARBON	120K	5%	1/4W	
R1503	1-247-881-00	CARBON	120K	5%	1/4W	
R1551	1-249-406-11	CARBON	120	5%	1/4W	
R1552	1-249-431-11	CARBON (A295)	15K	5%	1/4W	
R1552	1-249-433-11	CARBON (D550)	22K	5%	1/4W	
R1553	1-249-431-11	CARBON (A295)	15K	5%	1/4W	
R1553	1-249-433-11	CARBON (D550)	22K	5%	1/4W	
R1554	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1555	1-249-423-11	CARBON	3.3K	5%	1/4W	

< COMPOSITION CIRCUIT BLOCK >

RP601	1-239-598-11	COMPOSITION CIRCUIT BLOCK
RP602	1-232-998-11	COMPOSITION CIRCUIT BLOCK

< VARIABLE RESISTOR >

RV1101	1-223-251-11	RES, VAR, CARBON 100K/100K (SURROUND)
RV1102	1-223-251-11	RES, VAR, CARBON 100K/100K (DBFB)
RV1109	1-241-350-11	RES, VAR, CARBON 100K/100K (VOLUME)

< SWITCH >

S601	1-554-303-21	SWITCH, TACTILE (BAND)
S602	1-554-303-21	SWITCH, TACTILE (SHIFT)
S603	1-554-303-21	SWITCH, TACTILE (- (DUAL MODE TUNING))
S604	1-554-303-21	SWITCH, TACTILE (+ (DUAL MODE TUNING))
S605	1-554-303-21	SWITCH, TACTILE (1 (PRESET STATION))
S606	1-554-303-21	SWITCH, TACTILE (2 (PRESET STATION))
S607	1-554-303-21	SWITCH, TACTILE (3 (PRESET STATION))
S608	1-554-303-21	SWITCH, TACTILE (4 (PRESET STATION))
S609	1-554-303-21	SWITCH, TACTILE (5 (PRESET STATION))
S610	1-554-303-21	SWITCH, TACTILE (6 (PRESET STATION))
S611	1-554-303-21	SWITCH, TACTILE (7 (PRESET STATION))
S612	1-554-303-21	SWITCH, TACTILE (8 (PRESET STATION))
S613	1-554-303-21	SWITCH, TACTILE (9 (PRESET STATION))
S614	1-554-303-21	SWITCH, TACTILE (0 (PRESET STATION))
S616	1-554-303-21	SWITCH, TACTILE (MEMORY)
S617	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)
S619	1-554-303-21	SWITCH, TACTILE (VIDEO)
S620	1-554-303-21	SWITCH, TACTILE (TAPE)
S621	1-554-303-21	SWITCH, TACTILE (CD)
S622	1-554-303-21	SWITCH, TACTILE (TUNER)
S623	1-554-303-21	SWITCH, TACTILE (PHONO)
S625	1-554-303-21	SWITCH, TACTILE (FLAT)
S626	1-554-303-21	SWITCH, TACTILE (DANCE)

Ref. No.	Part No.	Description			Remark
S627	1-554-303-21	SWITCH, TACTILE (POPS)			
S628	1-554-303-21	SWITCH, TACTILE (ROCK)			
S629	1-554-303-21	SWITCH, TACTILE (CLASSIC)			
		< VIBRATOR >			
X601	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)			
**********					
*	1-650-434-11	POWER BOARD (A295)			
		**********			
*	1-560-595-00	TERMINAL (WITH BASE) (E, PX)			
	1-533-217-31	HOLDER, FUSE			
		< CAPACITOR >			
⚠C1301	1-161-744-51	CERAMIC	0.01uF		400V
C1348	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
* CN1350	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN1351	1-568-226-11	PIN, CONNECTOR 2P			
		< FUSE >			
⚠F1301	1-532-350-00	FUSE (4A/125V) (EXCEPT Canadian)			
⚠F1301	1-576-108-11	FUSE (4A/125V) (Canadian)			
⚠F1302	1-532-350-00	FUSE (4A/125V) (EXCEPT Canadian)			
⚠F1303	1-532-350-00	FUSE (4A/125V) (Canadian)			
⚠F1303	1-576-108-11	FUSE (4A/125V) (Canadian)			
⚠F1304	1-532-350-00	FUSE (4A/125V) (EXCEPT Canadian)			
⚠F1304	1-576-108-11	FUSE (4A/125V) (Canadian)			
		< RESISTOR >			
R1391	1-202-725-00	SOLID (Canadian)	3.3M	10% 1/2W	
		< TRANSFORMER >			
⚠T1301	1-423-914-11	TRANSFORMER, POWER (AEP, UK, G, IT)			
⚠T1301	1-423-915-11	TRANSFORMER, POWER (E, AUS, MX, PX)			
⚠T1301	1-423-917-11	TRANSFORMER, POWER (Canadian)			
**********					

Ref. No.	Part No.	Description			Remark
*	A-4365-902-A	POWER AMPLIFIER BOARD, COMPLETE (Canadian, AEP, UK)			
*	A-4365-923-A	POWER AMPLIFIER BOARD, COMPELTE (E, AUS. MX, PX)			
*	A-4365-931-A	POWER AMPLIFIER BOARD, COMPLETE (US)			
*	A-4369-101-A	POWER AMPLIFIER BOARD, COMPLETE (G, IT)			
		**********			
		< CAPACITOR >			
C1201	1-124-925-11	ELECT	2.2uF	20%	100V
C1202	1-162-286-31	CERAMIC	220PF	10%	50V
C1203	1-162-286-31	CERAMIC (A295)	220PF	10%	50V
C1204	1-124-910-11	ELECT	47uF	20%	50V
C1205	1-124-910-11	ELECT	47uF	20%	50V
C1206	1-124-122-11	ELECT (A295)	100uF	20%	50V
C1206	1-124-929-11	ELECT (D550)	22uF	20%	100V
C1207	1-136-165-00	FILM	0.1uF	5%	50V
C1208	1-124-916-11	ELECT (A295)	22uF	20%	63V
C1208	1-124-979-11	ELECT (D550)	33uF	20%	6.3V
C1209	1-136-165-00	FILM	0.1uF	5%	50V
C1210	1-136-163-00	FILM	0.068uF	5%	50V
C1211	1-136-163-00	FILM	0.068uF	5%	50V
C1220	1-124-917-11	ELECT (A295)	33uF	20%	63V
C1220	1-124-927-11	ELECT (D550)	4.7uF	20%	100V
C1230	1-161-494-00	CERAMIC (G, IT)	0.022uF		25V
C1231	1-161-494-00	CERAMIC (G, IT)	0.022uF		25V
C1232	1-161-494-00	CERAMIC (G, IT)	0.022uF		25V
C1251	1-124-925-11	ELECT	2.2uF	20%	100V
C1252	1-162-286-31	CERAMIC	220PF	10%	50V
C1253	1-162-286-31	CERAMIC (A295)	220PF	10%	50V
C1254	1-124-910-11	ELECT	47uF	20%	50V
C1255	1-124-910-11	ELECT	47uF	20%	50V
C1256	1-124-122-11	ELECT (A295)	100uF	20%	50V
C1256	1-124-929-11	ELECT (D550)	22uF	20%	100V
C1257	1-136-165-00	FILM	0.1uF	5%	50V
C1260	1-136-163-00	FILM	0.068uF	5%	50V
C1261	1-136-163-00	FILM	0.068uF	5%	50V
C1280	1-161-494-00	CERAMIC (G, IT)	0.022uF		25V

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

POWER AMPLIFIER

Ref. No.	Part No.	Description				Remark
		< CONNECTOR >				
* CN1203	1-564-518-11	PLUG, CONNECTOR 3P				
		< DIODE >				
D1201	8-719-815-85	DIODE 1S1585 (D550)				
D1201	8-719-987-63	DIODE 1N4148M (A295)				
D1210	8-719-987-63	DIODE 1N4148M (D550)				
D1211	8-719-987-63	DIODE 1N4148M (D550)				
D1251	8-719-815-85	DIODE 1S1585 (D550)				
D1251	8-719-987-63	DIODE 1N4148M (A295)				
		< IC >				
IC1201	8-749-900-96	IC STK-4142MK2 (Canadian, AEP, UK, G, IT)				
IC1201	8-749-920-09	IC STK-4152MK2K (E, AUS, MX, PX)				
IC1201	8-749-921-68	IC STK-4231MK2 (US)				
		< TRANSISTOR >				
Q1201	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
Q1202	8-729-900-80	TRANSISTOR DTC114ES (A295)				
Q1203	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1251	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
		< RESISTOR >				
R1201	1-249-417-11	CARBON	1K	5%	1/4W	
R1202	1-249-438-11	CARBON	56K	5%	1/4W	
R1203	1-249-414-11	CARBON	560	5%	1/4W	
R1204	1-249-438-11	CARBON	56K	5%	1/4W	
R1205	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1205	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1206	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1206	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1207	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1207	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1208	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1208	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
⚠R1209	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1210	1-217-151-00	METAL PLATE (A295)	0.22		2W	F
⚠R1210	1-217-611-00	METAL PLATE (D550)	0.1		2W	F
R1211	1-249-417-11	CARBON	1K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R1212	1-249-431-11	CARBON (A295)	15K	5%	1/4W	
R1212	1-249-435-11	CARBON (D550)	33K	5%	1/4W	
R1213	1-249-441-11	CARBON	100K	5%	1/4W	
R1214	1-249-421-11	CARBON (A295)	2.2K	5%	1/4W	
R1214	1-249-424-11	CARBON (D550)	3.9K	5%	1/4W	
R1215	1-249-421-11	CARBON (A295)	2.2K	5%	1/4W	
R1215	1-249-424-11	CARBON (D550)	3.9K	5%	1/4W	
R1216	1-249-421-11	CARBON (A295)	2.2K	5%	1/4W	
R1216	1-249-424-11	CARBON (D550)	3.9K	5%	1/4W	
R1217	1-249-421-11	CARBON (A295)	2.2K	5%	1/4W	
R1217	1-249-424-11	CARBON (D550)	3.9K	5%	1/4W	
R1218	1-249-393-11	CARBON (A295)	10	5%	1/4W	
R1218	1-249-397-11	CARBON (D550)	22	5%	1/4W	
R1219	1-249-397-11	CARBON (D550)	22	5%	1/4W	
R1227	1-249-429-11	CARBON	10K	5%	1/4W	
R1228	1-247-881-00	CARBON	120K	5%	1/4W	
R1229	1-249-428-11	CARBON (D550)	8.2K	5%	1/4W	
R1229	1-249-437-11	CARBON (A295)	47K	5%	1/4W	
R1230	1-249-439-11	CARBON (A295)	68K	5%	1/4W	
R1231	1-249-417-11	CARBON (A295)	1K	5%	1/4W	
R1232	1-249-434-11	CARBON (A295)	27K	5%	1/4W	
R1238	1-247-903-00	CARBON (D550)	1M	5%	1/4W	
R1238	1-249-433-11	CARBON (A295)	22K	5%	1/4W	
R1239	1-249-426-11	CARBON (A295)	5.6K	5%	1/4W	
⚠R1243	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1251	1-249-417-11	CARBON	1K	5%	1/4W	
R1252	1-249-438-11	CARBON	56K	5%	1/4W	
R1253	1-249-414-11	CARBON	560	5%	1/4W	
R1254	1-249-438-11	CARBON	56K	5%	1/4W	
R1255	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remark
R1255	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1256	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1256	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1257	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1257	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
R1258	1-249-425-11	CARBON (A295)	4.7K	5%	1/4W	
R1258	1-249-429-11	CARBON (D550)	10K	5%	1/4W	
⚠R1259	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1260	1-217-151-00	METAL PLATE (A295)	0.22		2W	F
⚠R1260	1-217-611-00	METAL PLATE (D550)	0.1		2W	F
R1261	1-249-417-11	CARBON	1K	5%	1/4W	
R1262	1-249-431-11	CARBON (A295)	15K	5%	1/4W	
R1262	1-249-435-11	CARBON (D550)	33K	5%	1/4W	
R1263	1-249-441-11	CARBON	100K	5%	1/4W	
R1268	1-249-393-11	CARBON (A295)	10	5%	1/4W	
R1268	1-249-397-11	CARBON (D550)	22	5%	1/4W	
R1269	1-249-397-11	CARBON (D550)	22	5%	1/4W	
**********						
*	1-650-485-11	POWER PRIMARY BOARD (D550) **********				
	1-533-217-31	HOLDER, FUSE				
		< CAPACITOR >				
⚠C1301	1-161-744-51	CERAMIC	0.01uF			400V
		< CONNECTOR >				
CN1350	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P				
* CN1351	1-564-321-00	PIN, CONNECTOR 2P				
		< FUSE >				
⚠F1211	1-576-108-11	FUSE (4A/125V)				
		< RESISTOR >				
R1391	1-202-725-00	SOLID	3.3M	10%	1/2W	
**********						

Ref. No.	Part No.	Description				Remark
*	1-651-320-11	POWER SECONDARY BOARD (D550) **********				
	1-533-217-31	HOLDER, FUSE				
		< CAPACITOR >				
C1348	1-161-159-11	CERAMIC	0.1uF			50V
		< FUSE >				
⚠F1201	1-576-108-11	FUSE (4A/125V)				
⚠F1202	1-576-108-11	FUSE (4A/125V)				
		< RESISTOR >				
⚠R1331	1-212-934-00	FUSIBLE	1	5%	1/2W	F
**********						
*	1-650-504-11	SW BOARD ********				
		< CONNECTOR >				
* CN951	1-568-942-11	PIN, CONNECTOR 4P				
		< SWITCH >				
S951	1-692-785-11	SWITCH, PUSH (3 KEY) (DOLBY NR/TYPE SELET/DUBBING SPEED) (EXCEPT E, AUS, MX, PX)				
S951	1-692-786-11	SWITCH, PUSH (2 KEY) (TAPE SELECT/DUBBING SPEED) (E, AUS, MX, PX)				
**********						
*	1-638-729-11	TABLE MOTOR BOARD **********				
		< CAPACITOR >				
C704	1-161-375-00	CERAMIC	0.0022uF	20%		50V
		< CONNECTOR >				
* CN707	1-573-044-11	SOCKET, CONNECTOR 5P				
		< PHOTO SENSOR >				
D701	8-719-970-19	PHOTO SENSOR	GP-1A521			
		< RESISTOR >				
R701	1-249-416-11	CARBON	820	5%	1/4W	
**********						

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
5	1-590-576-11	WIRE, FLAT TYPE (11 CORE)	
6	1-751-747-11	WIRE (FLAT TYPE) (23 CORE)	
7	1-765-234-11	CORD, CONNECTION (17 CORE)	
⚠14	1-575-653-11	CORD, POWER (E, MX, PX)	
⚠15	1-575-651-11	CORD, POWER (AEP, G, IT)	
⚠16	1-696-570-21	CORD, POWER (UK)	
⚠17	1-696-848-21	CORD, POWER (AUS)	
⚠18	1-690-609-11	CORD, POWER (US, Canadian)	
⚠22	1-569-007-11	ADAPTOR, CONVERSION 2P (PX)	
* 58	1-690-708-11	CORD (WITH CONNECTOR) (D550)	
58	1-765-058-11	CORD (WITH CONNECTOR) (A295)	
* 107	1-452-538-11	MAGNET	
158	1-765-195-11	WIRE (FLAT TYPE) (7 CORE)	
167	1-537-645-11	JUMPER, FILM (WITH TERMINAL)	
169	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
⚠201	8-848-144-11	DEVICE, OPTICAL KSS-240A	
202	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
⚠F1201	1-576-108-11	FUSE (4A/125V) (US)	
⚠F1202	1-576-108-11	FUSE (4A/125V) (US)	
⚠F1211	1-576-108-11	FUSE (4A/125V) (US)	
⚠F1301	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1301	1-576-108-11	FUSE (4A/125V) (Canadian)	
⚠F1302	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1302	1-576-108-11	FUSE (4A/125V) (Canadian)	
⚠F1303	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1303	1-576-108-11	FUSE (4A/125V) (Canadian)	
⚠F1304	1-532-350-00	FUSE (4A/125V) (EXCEPT US, Canadian)	
⚠F1304	1-576-108-11	FUSE (4A/125V) (Canadian)	
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)	
HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)	
M101	X-4917-504-1	MOTOR ASSY (SLED)	
M102	X-4917-523-4	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	
M701	A-4604-849-A	MOTOR ASSY, ROTARY	
M702	A-4604-847-A	MOTOR ASSY, LOADING	
M901	X-3362-377-1	MOTOR (WH) ASSY	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	
⚠S1301	1-572-267-61	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	
⚠S1302	1-570-046-21	SWITCH, VOLTAGE CHANGE (VOLTAGE SELECTOR) (E, PX)	
⚠T1301	1-423-916-11	TRANSFORMER, POWER (US)	

****

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-255-15	SCREW +P 2X3	
#2	7-621-775-20	SCREW +B 2.6X5	
#3	7-623-921-01	RING, RETAINING, CAPSTAN	
#4	7-682-554-04	SCREW +B 3X25	
#5	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#6	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
#7	7-685-133-19	SCREW +P 2.6X6 TYPE2	
#8	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S (E, PX)	
#9	7-685-135-19	SCREW +BTP 2.6X10 TYPE2 N-S	
#10	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT	
#11	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#12	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#13	7-688-001-01	W 2, SMALL	
#14	7-621-849-00	SCREW, TAPPING	
#15	7-682-547-09	SCREW +BVTT 3X6 (S)	
#16	7-682-548-04	SCREW +BVTT 3X8 (S)	
#17	7-682-961-01	SCREW +PSW 4X8	
#18	7-685-880-01	SCREW +BVTT 4X6	

****

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-467-430-11	COMMANDER, STANDARD (RM-S221)	
	1-501-374-11	ANTENNA, LOOP (AEP1, IT)	
	1-501-536-11	ANTENNA (AEP1, IT)	
	2-181-754-21	COVER (MLY), BATTERY (For RM-S221)	
*	3-376-136-01	CUSHION (HALF)	
	3-758-285-41	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP1)	
	3-758-285-51	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP1, IT)	
	3-758-285-61	MANUAL, INSTRUCTION (DANISH, FINNISH) (AEP1)	
*	4-963-173-01	CUSHION	
*	4-963-777-01	INDIVIDUAL CARTON (AEP1, IT)	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-959-276-11

Sony Corporation
Audio Group

English
94A04100-1
Printed in Japan
© 1994. 1
Published by Audio Sector Quality Assurance Dept.

HCD-A295/D550

SONY®
SERVICE MANUAL

US Model
HCD-D550
Canadian Model
AEP Model
UK Model
E Model
Australian Model
PX Model
HCD-A295

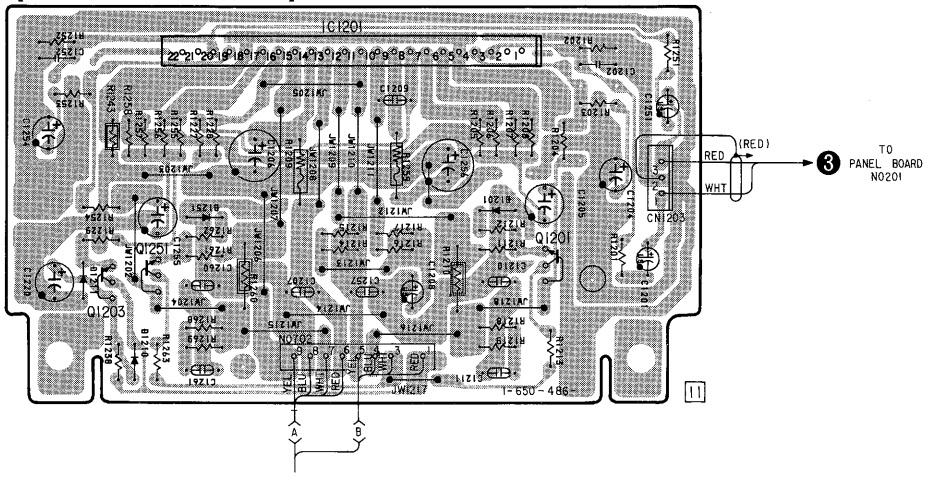
CORRECTION-1

Correct your service manual as shown below.

- The correct pin No. of IC1201 on Printed Wiring Board (Power Amplifier Board) as follows. (HCD-D550 only)

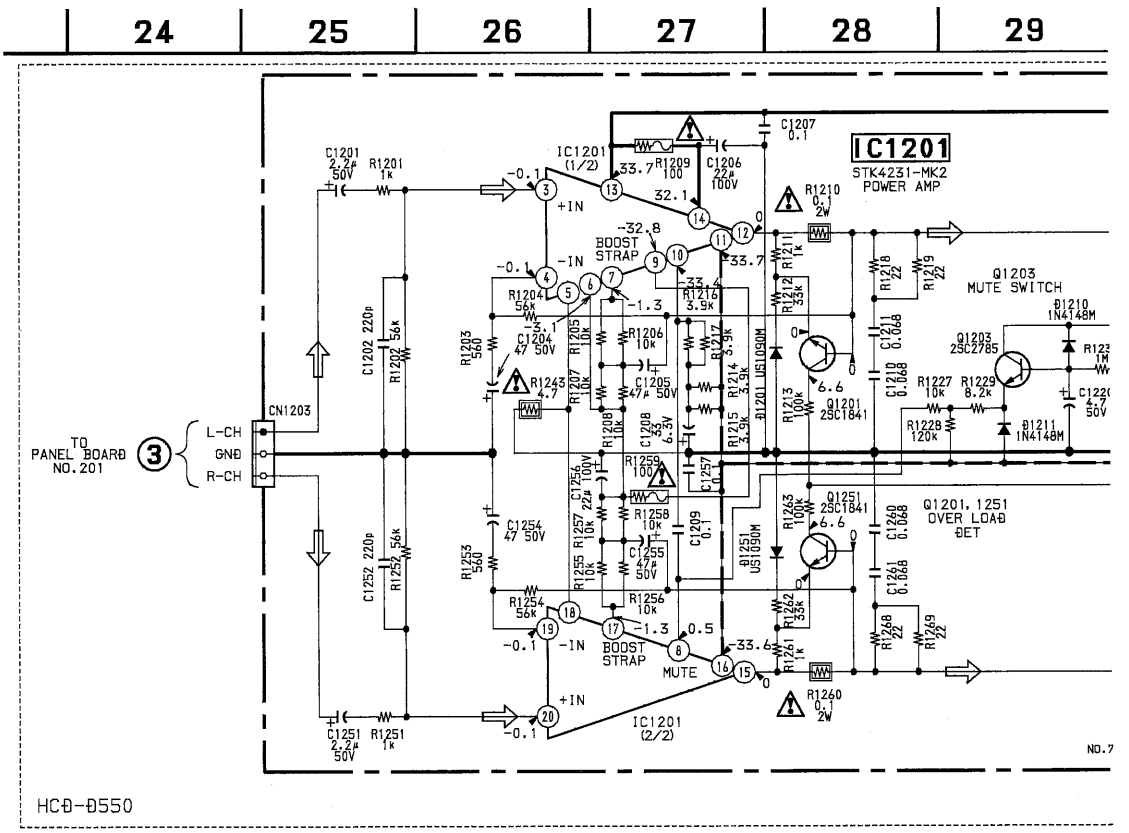
Page 30

【POWER AMPLIFIER BOARD】



• The correct pin No. of IC1201 on Schematic Diagram (Power Amplifier Board) as follows.
(HCD-D550 only)

Page 34, 35



English
94L0436-1
Printed in Japan

© 1994. 12

Published by Home A & V Products Div.
Quality Engineering Dept.

PS-LX56/LX56P

SERVICE MANUAL

Ver 1.1 2001. 07

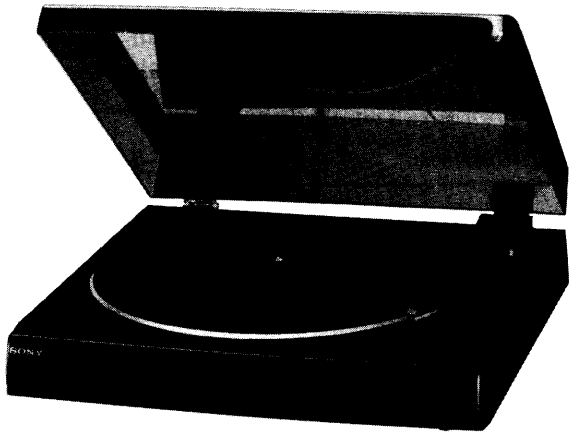


PHOTO : PS-LX56

US Model
Canadian Model
PX Model
Tourist Model
PS-LX56
AEP Model
E Model
Australian Model
PS-LX56/LX56P
UK Model
PS-LX56P

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/A295/A390/A390K/A395/A490/A490K/A495/D150/D250/D550/G1000/G2000.

SPECIFICATIONS

	(PS-LX56)
Turntable	
Platter	30cm (12 in.)
Motor	DC servo motor
Drive system	Belt drive
Speed	33 1/3 rpm/45 rpm switchable
Wow and flutter	0.2% (WRMS)
Signal-to-noise ratio	60 dB (DIN-B)
Automatic system	Return, reject
Tonearm	
Type	Dynamically blanced
Pivot-to-stylus length	203 mm (8 in.)
Overall arm length	235 mm (9 1/4 in.)
Cartridge	
Type	Moving magnet type
Frequency response	20 Hz-20kHz
Stylus	CN-234
General	
Dimensions	355 × 94 × 345 mm(w/h/d) (14 × 3 3/4 × 13 5/8 inches)
Weight	Approx. 2.5 kg (5 lb 8 oz)
Power requirement	US and Canadian model : 120V AC, 60Hz European model : 220-230V AC, 50/60Hz Australian model : 240V AC, 50Hz Model for other countries : 110-120V/220-240V adjustable with the voltage selector AC, 50/60Hz
Power consumption	2 W
Accessory supplied	45-rpm adaptor (1)
Optional accessories	Replacement stylus CN-234 Stat spray XP-C10 Cleaner XP-C1, XP-C2

Turntable	(PS-LX56P)
Platter	30 cm
Tone arm type	Dynamically balanced
Cartridge type	Moving magnet type
Stylus	Sony CN-234 (0.6 mil diamond)
Mass	Approx. 2.3 kg (5 lb 1 oz)
Dimensions	Approx. 355 x 95 x 345 mm (14 x 3 3/4 x 13 5/8 inches) (w/h/d, including projections)

Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

STEREO TURNTABLE SYSTEM

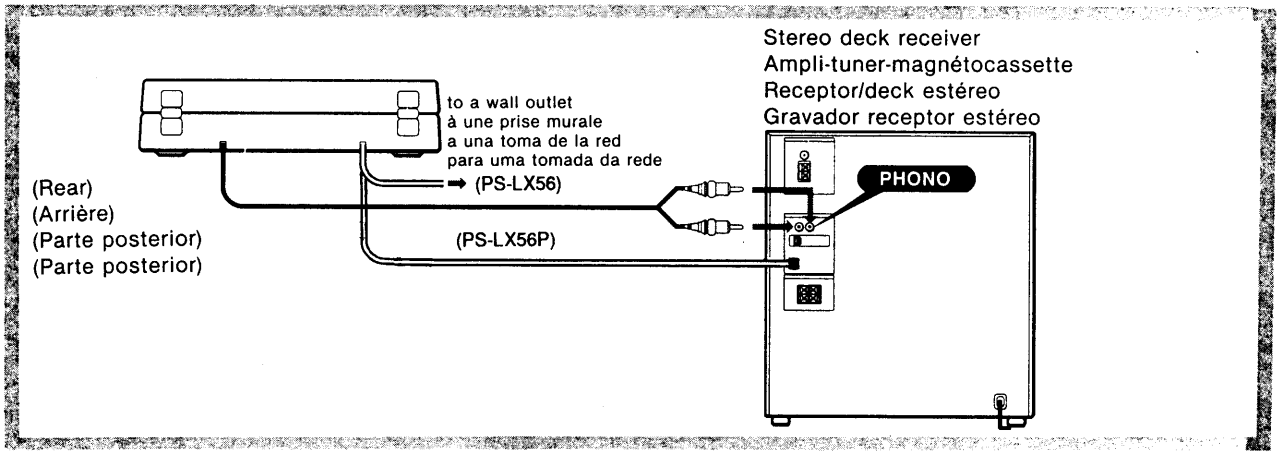
SONY

9-959-216-12
2001G0200-1
© 2001.7

Sony Corporation
Home Audio Company
Shinagawa Tec Service Manual Production Group

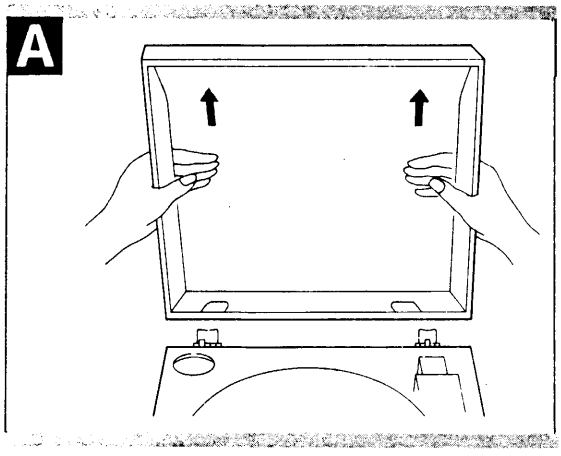
Connections

Note
Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



Notes on installation
- Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

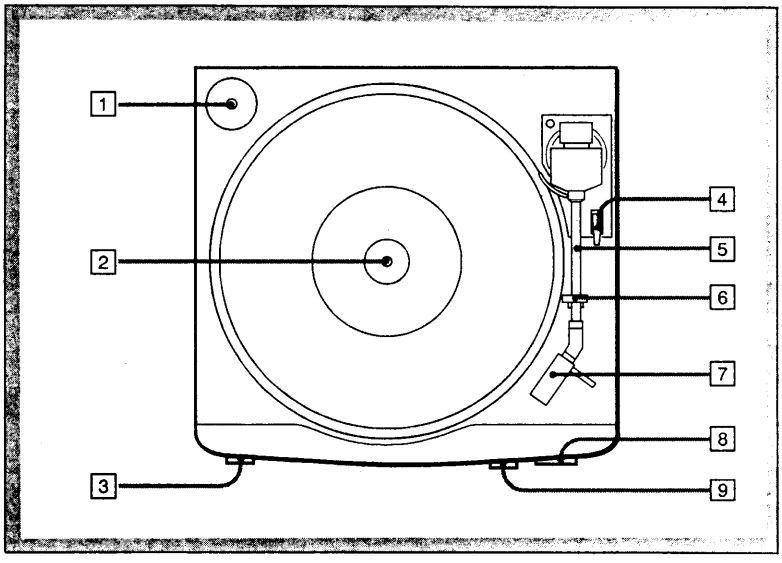
Nota
Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).



To remove the dust cover A

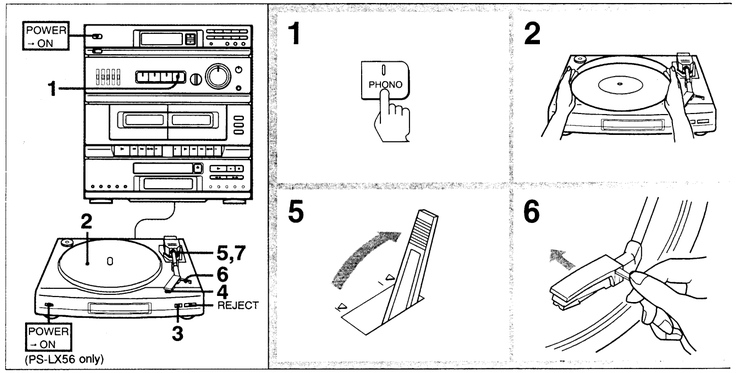
Open the cover fully and pull it up.

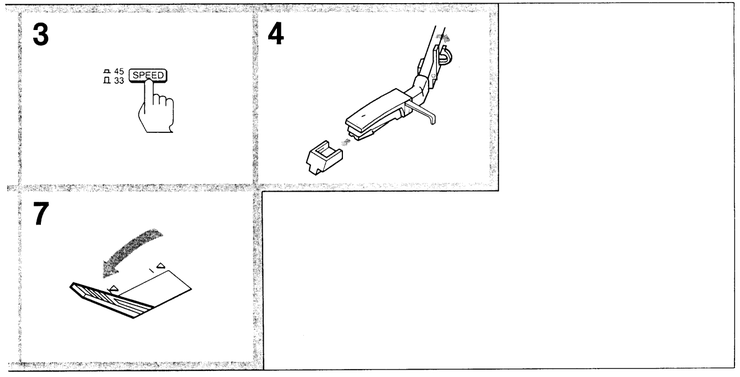
Location of Controls



1 45-rpm adaptor
2 Centre spindle
3 POWER switch (PS-LX56)
4 Cueing lever
5 Tonearm
6 Armrest
7 Cartridge
8 REJECT button
9 Speed selector

Playing Records





When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

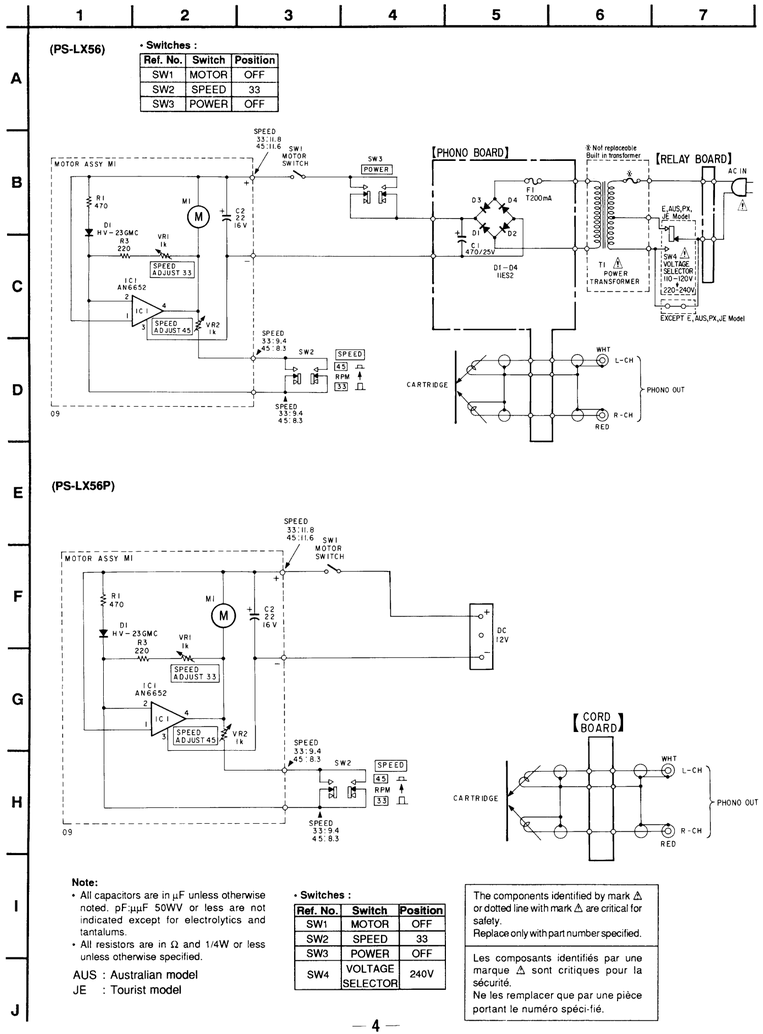
To play a different part of the record
Lift the tonearm by setting the cueing level to ▼, move the tonearm by hand to the desired point, then set the cueing lever to ▼.

To play a 17-cm record
Use the supplied adaptor

If the tonearm moves outward when you move it colse to the centre
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest
Press REJECT.

SCHEMATIC DIAGRAMS



Note:
- All capacitors are in μF unless otherwise noted. pF:μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

AUS : Australian model
JE : Tourist model

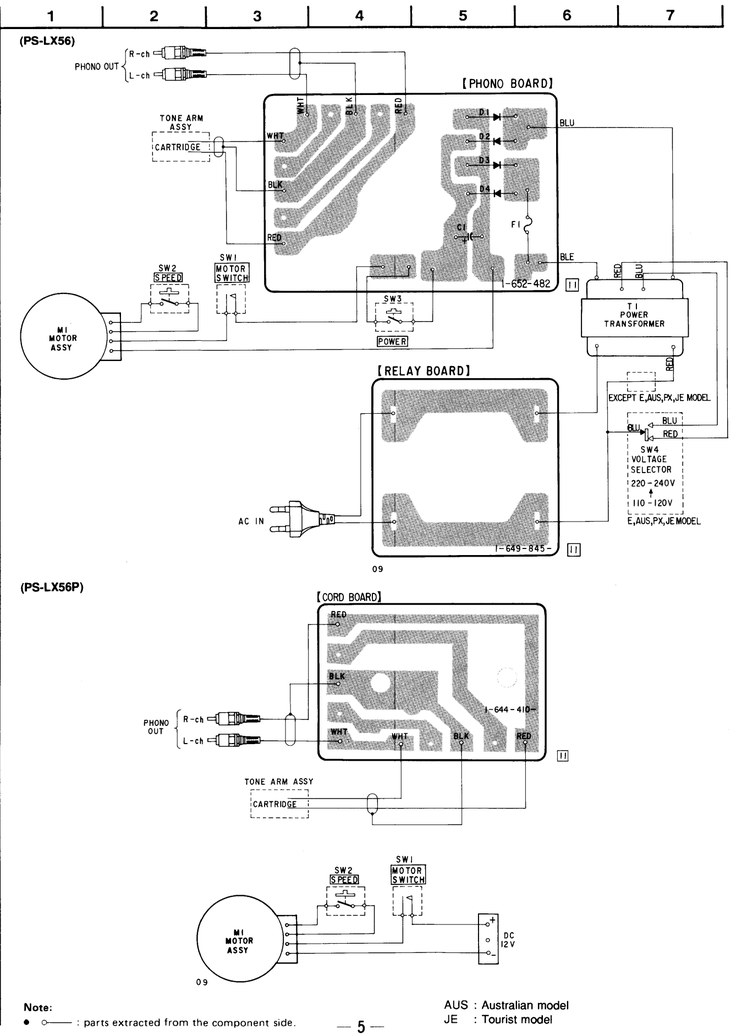
• Switches :

Ref. No.	Switch	Position
SW1	MOTOR	OFF
SW2	SPEED	33
SW3	POWER	OFF
SW4	VOLTAGE SELECTOR	240V

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spéci-fié.

WIRING DIAGRAMS



Note:
- ○—— : parts extracted from the component side.

AUS : Australian model
JE : Tourist model

EXPLODED VIEW

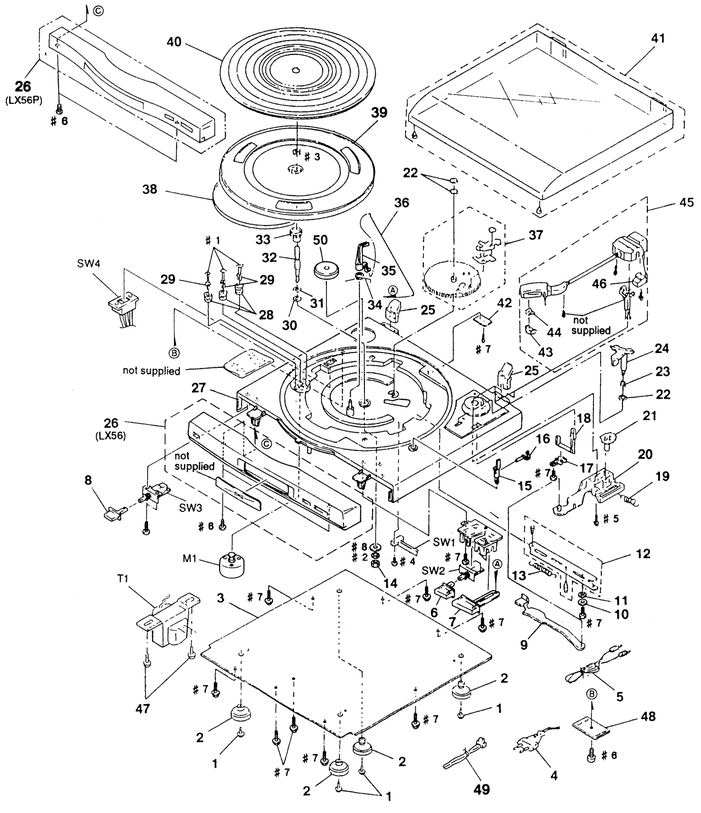
NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.



Ref.No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT	
2	4-950-490-01	PLASTIC STAND	
* 3	4-961-804-01	BUTTON BOARD	
⚠4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)	
⚠4	1-575-975-11	CORD, AC (LX56: CND, US)	
⚠4	1-590-074-11	CORD, AC (LX56: E)	
⚠4	1-690-608-11	CORD, AC (LX56: AUS)	
⚠4	1-696-570-21	CORD, AC (LX56: UK)	
5	1-555-116-11	CORD, PHONO...(BLACK)	
6	4-964-177-01	KNOB SPEED...(BLACK)	
6	4-964-177-11	KNOB SPEED ...(LX56:SILVER, SILVER METALLIC)	
7	4-964-178-01	KNOB REJECT...(BLACK)	
7	4-964-178-11	KNOB REJECT ...(LX56:SILVER, SILVER METALLIC)	
8	4-964-184-01	KNOB POWER (LX56:BLACK)	
8	4-964-184-11	KNOB POWER ...(LX56:SILVER, SILVER METALLIC)	
9	4-947-487-01	RETURN LINK	
10	4-890-173-00	WASHER	
11	3-659-350-00	WASHER	
12	A-4604-947-A	RETURN ASSY, LEVER	
13	4-947-485-01	SPRING (22)	
14	4-947-510-01	NUT	
15	4-947-491-01	ARM REST	
16	A-4660-499-A	ARM CLIP ASSY	
17	4-947-477-01	CUEING (BASE)	
18	4-947-468-01	LEVER, CUEING	
19	4-963-537-01	SPRING	
20	4-963-536-01	LINK RETURN	
21	4-963-535-01	ADJUST CAM	
22	4-947-514-01	4MM CS RING	
23	4-947-467-01	SPRING (6)	
24	4-947-466-01	TONE ARM ELEVATOR	
25	A-4660-498-A	HINGE ASSY	
26	A-4384-982-A	PANEL (B) ASSY, FRONT (LX56: SILVER)	
26	A-4411-941-A	PANEL (B) ASSY, FRONT (LX56: SILVER METALLIC)	
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)	
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)	
26	A-4660-976-A	FRONT PANEL (G) ASSY (LX56P)	
* 27	4-950-487-01	MAIN CABINET (B)...(BLACK)	
* 27	4-950-487-11	MAIN CABINET (B) ...(LX56:SILVER, SILVER METALLIC)	
28	4-947-505-01	CUSHION MOTOR	
29	4-947-504-01	COLLAR	
30	3-451-162-00	WASHER (56)	
31	3-701-445-21	WASHER	
32	4-947-498-01	STELL BALL	
33	4-947-497-01	GEAR	
34	4-947-496-01	SPRING (34)	
35	4-947-495-01	WIPER REJECT	
36	4-948-101-01	SPRING (38)	
37	A-4604-916-A	GEAR ASSY, SPUR	
38	4-947-503-01	BELT	
39	4-947-494-01	TURNTABLE PLATTER	
40	4-947-539-01	RUBBER MAT	
41	A-4604-946-A	DUST COVER ASSY	
* 42	1-652-482-11	PHONO BOARD (LX56)	
* 42	1-644-410-11	CORD BOARD (LX56P)	
43	4-948-095-01	COVER, CARTRIDGE	
44	4-951-290-01	STYLUS (CN-234)	
45	A-4604-940-A	ARM ASSY, TONE	
46	4-947-464-01	COUNTER WEIGHT	
47	4-952-961-01	SCREW (LX56)	
* 48	1-649-845-11	RELAY BOARD (LX56)	
49	1-557-109-21	CORD, DC (LX56P)	
50	3-701-806-00	ADAPTOR,45	
M1	A-4604-945-A	MOTOR ASSY	
SW1	1-570-666-11	SWITCH (LEAF)	
SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
⚠SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
⚠T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
⚠T1	1-450-987-21	TRANSFORMER, POWER (LX56: AUS, E, PX, EA, JE, MX, SP)	
⚠T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
⚠T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	

CORD | PHONO | RELAY

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref.No.	Part No.	Description	Remark
*	1-644-410-11	CORD BOARD (LX56P)	
		**********	
**********			
*	1-652-482-11	PHONO BOARD (LX56)	
		**********	
		< CAPACITOR >	
C1	1-126-012-11	ELECT 470uF 16V	
		< DIODE >	
D1	8-719-200-82	DIODE 11ES2	
D2	8-719-200-82	DIODE 11ES2	
D3	8-719-200-82	DIODE 11ES2	
D4	8-719-200-82	DIODE 11ES2	
		< FUSE >	
⚠F1	1-532-613-XX	FUSE TIME-LAG (T200mA)	
**********			
*	1-649-845-11	RELAY BOARD (LX56)	
		**********	
**********			

Ref.No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	3-758-045-11	MANUAL INSTRUCTION (English, French, Spanish, Portuguese) (LX56 AEP, CND)	
	3-758-045-21	MANUAL INSTRUCTION (English) (LX56 US, UK)	
	3-758-045-41	MANUAL INSTRUCTION (German, Dutch, Swedish, Italian) (LX56 AEP, IT)	
	3-758-045-51	MANUAL INSTRUCTION (English, French, Spanish, Chinese) (LX56 AUS, E, PX, MX, EA, MY, SP, JE)	
	3-758-045-61	MANUAL INSTRUCTION (English, German, Polish) (LX56 EE, CIS)	
*	4-947-532-01	SNOW BOX (L)	
*	4-947-533-01	SNOW BOX (R)	
	3-701-806-00	ADAPTOR,45	
**********			
		********** HARDWARE LIST **********	
#1	7-621-773-87	SCREW (64)	
#2	7-623-210-22	WASHER (57)	
#3	7-624-110-04	6MM E RING	
#4	7-685-105-01	SCREW (59)	
#5	7-685-645-79	SCREW (68)	
#6	7-685-646-79	SCREW (60)	
#7	7-685-647-79	SCREW (58)	
#8	7-688-005-01	WASHER (69)	

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001.07	PDF registration (including : 9-959-216-81, 9-959-216-82, 9-959-216-83, 9-959-216-91)
1.0	1993.11	New

SS-D290

SERVICE MANUAL

Canadian Model
E Model
Australian Model
PX Model

This set is the speaker system in
LBT-A110/A110K/A290/A290K/A295.

Photo : L-CH

SPECIFICATIONS

Speaker system	: 3-way speaker system
Mass	: Approx. 4.3kg per speaker
Dimensions	: Approx. 260 × 475 × 185mm (w/h/d, including projections)

Design and specifications are subject to change without notice.

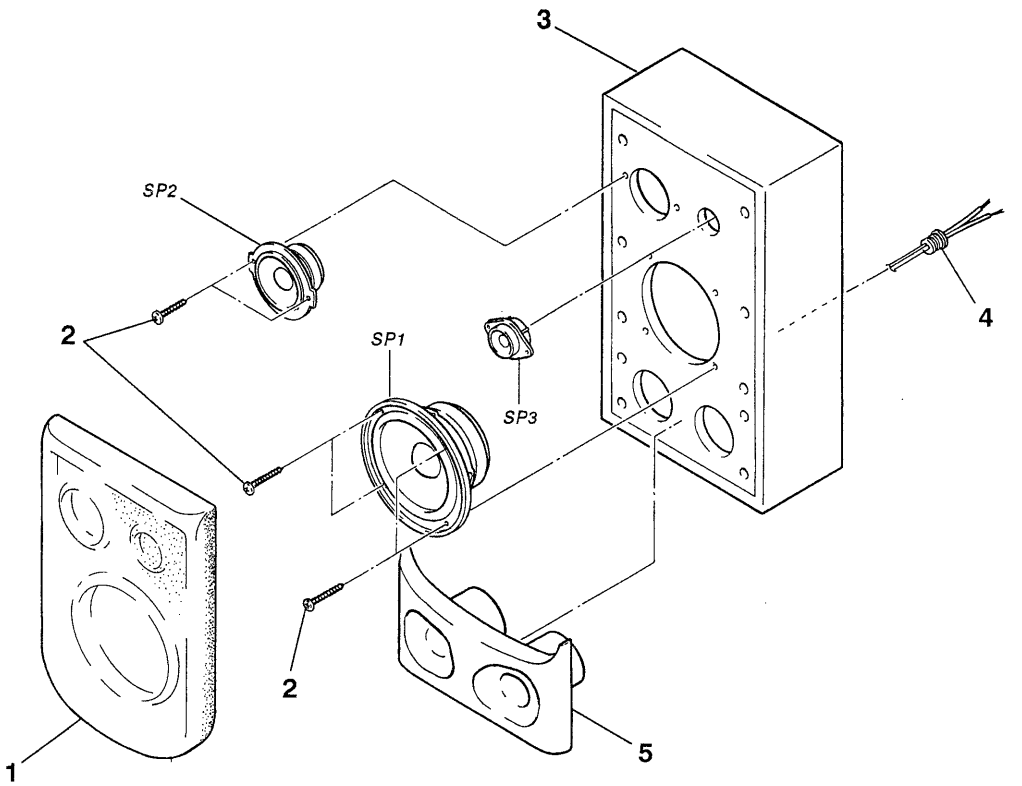
SPEAKER SYSTEM

SONY®

EXPLODED VIEW AND PARTS LIST

NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviations
  AUS : Australian Model
  MY : Malaysia Model
  MX : Mexican Model
  SP : Singapore Model
  EA : Saudi Arabia Model



Ref. No.	Part No.	Description	Remark
1	X-4944-228-1	PANEL (L) ASSY, FRONT (Canadian, E, AUS, MY, MX, PX)	(Made in Malaysia)
1	X-4944-229-1	PANEL (R) ASSY, FRONT (Canadian, E, AUS, MY, MX, PX)	(Made in Malaysia)
1	X-4944-301-1	PANEL (L) ASSY, FRONT (E, AUS, MX, SP, EA)	(Made in Indonesia)
1	X-4944-302-1	PANEL (R) ASSY, FRONT (E, AUS, MX, SP, EA)	(Made in Indonesia)
2	4-874-614-61	SCREW (M3.5X16)	
* 3	A-4353-679-A	CABINET (L) ASSY, SPEAKER (Canadian, E, AUS, MY, MX, PX)	(Made in Malaysia)
* 3	A-4353-680-A	CABINET (R) ASSY, SPEAKER (Canadian, E, AUS, MY, MX, PX)	(Made in Malaysia)
* 3	A-4353-681-A	CABINET (L) ASSY, SPEAKER (E, AUS, MX, SP, EA)	(Made in Indonesia)
* 3	A-4353-682-A	CABINET (R) ASSY, SPEAKER (E, AUS, MX, SP, EA)	(Made in Indonesia)
4	1-575-696-11	CORD, SPEAKER (WITH (C))	
5	X-4944-230-1	DUCT ASSY, ORNAMENTAL (Canadian, E, AUS, MY, MX, PX)	(Made in Malaysia)
5	X-4944-587-1	DUCT ASSY, ORNAMENTAL (E, AUS, MX, SP, EA)	(Made in Indonesia)
SP1	1-544-451-11	SPEAKER (16CM) (WOOFER)	
SP2	1-544-452-21	SPEAKER (6CM) (MID-RANGE)	
SP3	1-544-453-21	SPEAKER (2CM) (TWEETER)	

****

ACCESSORIES & PACKING MATERIALS

****

*	4-964-536-01	CUSHION (E, AUS, MX, SP, EA)	(Made in Indonesia)
*	4-964-536-11	CUSHION (Canadian, E, AUS, MY, MX, PX)	(Made in Malaysia)

English
94B0230-1D
Printed in Japan

©1994.2

Published by Audio Sector Quality Assurance Dept.